## SECTION C.

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## TABLE NOTES

- Because of rounding, detail may not add to totals.
- Dashes or asterisks appearing in lieu of figures indicate that the amounts are less than 50 thousand dollars or less than 0.5 percent.
- The abbreviation "FFRDCs" appearing in statistical tables refers to federally funded research and development centers.
- In tables showing extramural performers, obligations of the U.S. Department of Agriculture to agricultural experiment stations are included within obligations to universities and colleges.
- Defense agencies within the Department of Defense include the Ballistic Missile Defense Organization, the
  Defense Advanced Research Projects Agency, the Defense Information Systems Agency, the Defense
  Logistics Agency, the Defense Threat Reduction Agency, the Joint Staff, the Special Operations Command,
  and the Washington Headquarters Services.
- Data for only those agencies that had obligations in the variables represented by a particular table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in a particular table, refer to appendix B.

## Table C-1. Federal obligations for research and development, by character of work, and R&D plant: fiscal years 1951-2000

### [Dollars in thousands]

Fiscal years	Total	Total research and	Rese	earch	Development	R&D plant
		development	Basic	Applied		
1951	1,851,571	1,521,527	NA	NA	NA	330,044
1952	2,216,848	1,909,665	120,945	NA	NA	307,183
1953 1954	2,167,456 1,918,046	1,919,543 1,761,840	115,997 116,033	NA NA	NA NA	247,913 156,206
1954 1955	2,251,894	2,044,593	130,068	NA NA	NA NA	207,301
1956	3,266,903	2,988,203	206,441	645,506	2,136,256	278,700
1957	4,389,237	3,932,001	262,348	662,199	3,007,454	457,236
1958	4,906,015	4,569,722	334,543	744,264	3,490,915	336,293
1959 1960	7,122,610 8,080,015	6,693,510 7,551,746	465,981 590,374	874,272 1,282,135	5,353,257 5,679,237	429,100 528,269
1961	9,607,023	9,058,623	814,513	1,663,431	6,580,679	548,400
1962	11,069,059	10,289,947	986,314	2,018,481	7,285,152	779,112
1963	13,662,879	12,494,611	1,151,753	2,356,150	8,986,708	1,168,268
1964 1965	15,323,870 15,745,852	14,225,354 14,614,249	1,303,000 1,435,469	2,571,452 2,811,761	10,350,902 10,367,019	1,098,516 1,131,603
1966	16,178,640	15,320,334	1,579,181	3,081,066	10,660,087	858,306
1967	17,149,186	16,529,099	1,845,847	2,785,543	11,897,709	620,087
1968	16,525,038	15,921,208	1,840,562	2,940,500	11,140,146	603,830
1969	16,309,900	15,640,888	1,944,773	2,700,117	10,995,998	669,012
1970	15,863,385	15,338,937	1,925,908	2,974,890	10,438,139	524,448
1971	16,153,756	15,542,512	1,980,141	3,143,030	10,419,341	611,244
1972	17,097,951	16,495,895	2,186,937	3,360,759	10,948,199	602,056
1973 1974	17,574,486 18,176,457	16,800,153 17,410,128	2,232,006 2,387,681	3,349,423 3,787,559	11,218,724 11,234,888	774,333 766,329
1975	19,859,548	19,038,818	2,588,427	4,141,281	12,309,110	820,730
1976	21,616,382	20,779,658	2,767,454	4,851,878	13,160,326	836,724
1977	24,817,577	23,450,377	3,258,640	5,255,475	14,936,262	1,367,200
1978	27,140,849	25,845,137	3,698,604	5,908,154	16,238,379	1,295,712
1979 1980	29,620,597 31,386,095	28,145,142 29,830,432	4,192,665 4,674,156	6,342,340 6,923,222	17,610,137 18,233,054	1,475,455 1,555,663
1981	34,589,634	33,103,924	5,041,295	7,171,485	20,891,144	1,485,710
1982	37,822,363	36,432,589	5,481,605	7,540,580	23,410,404	1,389,774
1983	40,009,032	38,711,537	6,260,131	7,993,394	24,458,012	1,297,495
1984	44,012,149	42,224,865	7,067,359	7,911,414	27,246,092	1,787,284
1985	50,180,369	48,359,565	7,818,682	8,314,739	32,226,144	1,820,804
1986	52,951,181	51,412,364	8,153,076	8,349,123	34,910,165	1,538,817
1987	57,099,656	55,253,693	8,942,425	8,998,096	37,313,172	1,845,963
1988 1989	58,826,512 63,571,605	56,769,425 61,406,484	9,473,618 10,602,011	9,176,527 10,163,520	38,119,280 40,640,953	2,057,087 2,165,121
1990	65,831,189	63,559,471	11,285,593	10,336,771	41,937,107	2,271,718
1991	64,147,951	61,295,152	12,170,794	11,797,583	37,326,775	2,852,799
1992	68,577,184	65,592,590	12,489,864	12,000,734	41,101,992	2,984,594
1993	70,414,697	67,314,025	13,399,121	13,491,376	40,423,528	3,100,672
1994 1995	69,450,776 70,442,935	67,235,390 68,186,798	13,523,476 13,877,031	13,887,733 14,557,365	39,824,181 39,752,402	2,215,386 2,256,137
1996	69,399,164	67,653,047	14,464,035	13,795,729	39,393,283	1,746,117
1997	71,753,430	69,826,779	14,941,892	14,423,397	40,461,490	1,926,651
1998	73,743,457	71,903,293	15,613,012	15,309,257	40,981,024	1,840,164
1999 (Preliminary)	77,650,094	75,351,321	17,366,858	16,454,828	41,529,635	2,298,773
2000 (Preliminary)	77,185,562	75,104,342	18,209,439	16,470,143	40,424,760	2,081,220

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

# Table C-2. Summary of Federal funds for research and development and for R&D plant: fiscal years 1998, 1999, and 2000

### [In millions of dollars and percent change]

Page 1 of 2

		Preliminary			
ltem	1998	1999	Percent change 1998-1999	2000	Percent change 1999-2000
Total outlays for research and development and for R&D plant	\$72,295.6	\$75,412.6	4.3	\$75,122.7	-0.4
Research and development	70,434.5 1,861.1	73,407.9 2,004.7	4.2 7.7	73,000.0 2,122.7	6 5.9
Total obligations for research and development and for R&D plant	73,743.5	77,650.1	5.3	77,185.6	6
Research and development, total	71,903.3	75,351.3	4.8	75,104.3	3
By performers: Intramural 1 Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	31,839.7 1,188.8 13,365.9	18,271.6 31,906.1 1,294.6 14,981.6 4,108.0	6.8 .2 8.9 12.1 5.6	17,641.7 31,640.0 1,337.0 15,191.3 4,470.7	-3.4 8 3.3 1.4 8.8
Other nonprofit institutions FFRDCs administered by nonprofit institutions State and local governments Foreign	603.0 447.5	3,477.4 656.4 414.1 241.6	10.2 8.9 -7.5 -19.2	3,472.9 670.5 420.1 260.3	1 2.2 1.4 7.7
Research, total	30,922.3	33,821.7	9.4	34,679.6	2.5
By performers: Intramural 1 Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	4,635.1 844.1 11,741.0 2,743.0	8,440.1 4,907.0 896.4 13,191.7 2,962.3	6.0 5.9 6.2 12.4 8.0	8,775.7 4,709.6 947.7 13,421.8 3,372.8	4.0 -4.0 5.7 1.7 13.9
Other nonprofit institutions FFRDCs administered by nonprofit institutions State and local governments Foreign	214.5 240.1	2,729.8 245.5 329.8 119.0	12.6 14.5 37.4 3.9	2,761.6 222.8 345.5 122.0	1.2 -9.3 4.8 2.5
By fields of science: Life sciences Psychology Physical sciences Environmental sciences Mathematics and computer sciences	591.0 4,209.7 3,062.0	15,385.4 661.7 4,456.5 3,171.1 2,008.0	13.5 12.0 5.9 3.6 9.3	15,561.7 686.1 4,719.3 3,209.0 2,131.1	1.1 3.7 5.9 1.2 6.1
Engineering Social sciences Other sciences, n.e.c.	806.1	6,091.6 894.5 1,152.9	3.3 11.0 19.6	6,218.6 889.9 1,263.8	2.1 5 9.6
Basic research, total	15,613.0	17,366.9	11.2	18,209.4	4.9
By performers: Intramural 1 Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	1,119.7 326.4 7,952.2	3,107.5 1,292.5 336.9 8,931.6 1,807.2	6.5 15.4 3.2 12.3 10.0	3,336.2 1,439.6 338.8 9,226.9 1,969.4	7.4 11.4 .6 3.3 9.0
Other nonprofit institutions FFRDCs administered by nonprofit institutions State and local governments Foreign	121.8 84.9	1,601.4 144.9 89.3 55.6	14.6 18.9 5.2 10.4	1,623.7 129.0 87.8 58.0	1.4 -10.9 -1.7 4.3
By fields of science: Life sciences Psychology Physical sciences Environmental sciences Mathematics and computer sciences	312.0 2,941.4 1,528.7	8,990.4 357.4 3,198.0 1,641.7 754.7	14.5 14.5 8.7 7.4 7.0	9,182.9 376.7 3,418.5 1,795.2 839.5	2.1 5.4 6.9 9.4 11.2
Engineering	224.8	1,653.5 249.1 522.2	3.7 10.8 15.3	1,803.4 252.6 540.6	9.1 1.4 3.5

## Table C-2. Summary of Federal funds for research and development and for R&D plant: fiscal years 1998, 1999, and 2000

[In millions of dollars and percent change]

Page 2 of 2

		Preliminary			
Item	1998	1999	Percent change 1998-1999	2000	Percent change 1999-2000
Applied research, total	\$15,309.3	\$16,454.8	7.5	\$16,470.1	0.1
By performers: Intramural 1 Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	5,046.9 3,515.4 517.7 3,788.9 1,100.7	5,332.6 3,614.5 559.5 4,260.1 1,155.2	5.7 2.8 8.1 12.4 5.0	5,439.5 3,270.0 608.8 4,194.9 1,403.4	2.0 -9.5 8.8 -1.5 21.5
Other nonprofit institutions FFRDCs administered by nonprofit institutions State and local governments Foreign	1,027.7 92.6 155.2 64.1	1,128.4 100.7 240.5 63.4	9.8 8.7 55.0 -1.2	1,137.9 93.8 257.8 64.0	.8 -6.8 7.2 1.0
By fields of science:     Life sciences     Psychology     Physical sciences     Environmental sciences     Mathematics and computer sciences     Engineering	5,704.1 279.0 1,268.3 1,533.2 1,131.4 4,301.0	6,395.0 304.3 1,258.5 1,529.5 1,253.3 4,438.1	12.1 9.1 8 2 10.8 3.2	6,378.8 309.4 1,300.9 1,413.7 1,291.5	3 1.7 3.4 -7.6 3.0
Social sciences Other sciences, n.e.c.	581.3 510.9	645.4 630.7	11.0 23.4	637.3 723.2	-1.3 14.7
Development, total	40,981.0	41,529.6	1.3	40,424.8	-2.7
By performers: Intramural 1 Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	1,147.2	9,831.5 26,999.1 398.2 1,789.9 1,145.6	7.5 8 15.5 10.2 1	8,866.0 26,930.3 389.3 1,769.4 1,097.9	-9.8 3 -2.2 -1.1 -4.2
Other nonprofit institutions FFRDCs administered by nonprofit institutions State and local governments Foreign	729.9 388.5 207.4 184.6	747.5 410.8 84.3 122.6	2.4 5.7 -59.4 -33.6	711.3 447.8 74.5 138.3	-4.8 9.0 -11.6 12.8
R&D plant, total	1,840.2	2,298.8	24.9	2,081.2	-9.5
By performers supported: Intramural Industrial firms FFRDCs administered by industrial firms Universities and colleges FFRDCs administered by universities and colleges	475.3 487.7 45.6 139.5 663.6	717.4 570.8 172.3 157.1 650.6	51.0 17.0 278.0 12.6 -2.0	476.6 516.6 248.9 147.3 668.2	-33.6 -9.5 44.4 -6.2 2.7
Other nonprofit institutions	10.9 12.1 5.5	10.4 14.6 5.5	-3.9 20.4 .3	10.2 12.0 1.5	-2.6 -18.2 -72.6

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural

NOTE: Because of rounding, detail may not add to totals. Percentages are computed using dollars in thousands.

FFRDCs = Federally funded research and development centers n.e.c. = Not elsewhere classified KEY:

# Table C-3. Federal funds for research and development and for R&D plant, by agency: fiscal years 1998, 1999, and 2000

### [Dollars in millions]

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		Obligations		Outlays			
Agency and subdivision	1998	Prelim	inary	1998	Prelim	inary	
		1999	2000		1999	2000	
Total, all agencies	73,743.5	77,650.1	77,185.6	72,295.6	75,412.6	75,122.7	
Departments:							
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Health Inspection Service Cooperative State Rsch, Ed, & Extension Svc	1,530.8	1,758.0	1,709.0	1,538.6	1,657.0	1,655.1	
	4.7	4.7	5.0	4.2	4.8	5.0	
	844.2	948.7	962.1	782.1	891.2	918.9	
	20.5	20.0	20.0	20.5	20.0	20.0	
	387.3	506.2	451.0	474.2	472.1	448.6	
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers & Stockyards Admin	71.5	65.0	55.6	55.0	55.9	47.8	
	.2	.2	.2	.2	.2	.2	
	1.4	1.4	1.4	1.4	1.4	1.4	
	190.4	202.4	202.4	190.6	202.0	202.0	
	2.7	2.7	3.4	2.7	2.7	3.4	
National Agricultural Statistics ServiceRural Business-Cooperative Service	3.3	3.2	3.2	3.3	3.2	3.2	
	4.4	3.5	4.5	4.4	3.5	4.5	
Department of Commerce, total Bureau of the Census Economic Development Administration National Institute of Standards & Technology National Oceanic & Atmospheric Administration Nat'l Telecommunications & Information Admin	996.9	1,197.0	1,162.5	1,063.5	1,093.2	1,087.2	
	8.6	16.3	8.3	8.6	16.3	8.3	
	.6	.6	.6	.6	.6	.6	
	415.7	583.2	566.0	482.3	479.3	490.6	
	546.4	572.8	561.5	546.5	572.8	561.5	
	25.5	24.2	26.3	25.5	24.2	26.3	
Department of Defense, total  Department of the Air Force  Department of the Army, total  Department of the Army, Civil Functions  Department of the Army, Military Functions	35,352.0	35,745.3	34,474.7	35,530.3	36,190.2	33,500.2	
	13,865.2	13,570.9	14,382.3	14,246.2	13,972.6	13,344.9	
	5,041.7	5,185.3	4,501.3	4,920.4	5,301.8	4,589.8	
	39.4	37.8	44.8	39.4	37.8	44.8	
	5,002.2	5,147.4	4,456.5	4,881.0	5,264.0	4,545.0	
Department of the Navy Defense Agencies, total Ballistic Missile Defense Organization Defense Advanced Research Projects Agency Defense Information Systems Agency	8,190.8	8,740.7	8,225.7	8,038.1	8,659.1	8,230.4	
	7,981.9	7,980.0	7,086.8	8,047.4	7,968.7	7,055.2	
	3,422.3	3,844.6	2,944.4	3,422.3	3,844.6	2,944.4	
	2,003.1	1,914.2	1,993.0	2,067.3	1,976.7	1,962.2	
	55.6	110.5	117.3	49.1	77.1	106.3	
Defense Logistics Agency Defense Threat Reduction Agency <sup>1</sup> Joint Staff Special Operations Command Washington Headquarters Services	122.3	71.9	37.2	56.0	63.6	52.7	
	275.8	307.0	349.8	239.4	302.9	337.2	
	53.9	161.2	49.1	53.9	161.2	49.1	
	142.7	207.3	191.9	183.0	170.4	190.0	
	1,906.0	1,363.2	1,404.1	1,976.4	1,372.2	1,413.3	
Operational Test & Evaluation, DirectorTest & Evaluation, Deputy Under Sec of Defense	30.3	31.8	25.4	27.8	37.0	26.4	
	242.0	236.6	253.1	250.4	251.1	253.5	
Department of Education	204.5	221.8	272.1	192.0	212.9	267.5	
Department of Energy	6,600.9	7,347.3	7,458.4	6,652.9	7,224.9	7,657.0	
Department of Health & Human Services, total  Administration on Aging  Administration for Children & Families  Agency for Health Care Policy & Research  Centers for Disease Control & Prevention	13,990.5	16,009.0	16,361.4	12,786.4	14,257.3	15,776.4	
	10.4	18.4	18.4	10.4	18.4	18.4	
	23.5	18.8	28.0	15.8	14.6	21.6	
	146.5	171.0	206.3	77.0	101.0	90.0	
	343.6	382.6	468.6	343.6	382.6	468.6	
Food & Drug Administration  Health Care Financing Administration  Health Resources & Services Administration  National Institutes of Health  Office of the Secretary, total	171.0	152.6	183.5	155.9	163.2	170.7	
	51.2	50.0	55.0	51.3	50.0	55.0	
	13.8	13.8	13.9	13.8	13.8	13.9	
	13,137.5	15,108.1	15,289.2	12,035.6	13,421.2	14,841.2	
	17.0	17.7	18.5	7.0	16.4	17.0	
Office of the Asst Sec, Planning & Evaluation	13.9	14.0	14.0	5.0	14.0	14.0	
	3.1	3.7	4.5	2.0	2.4	3.0	
	76.0	76.0	80.0	76.0	76.0	80.0	
Department of Housing & Urban Development	28.0	59.4	50.6	31.6	42.4	52.5	

# Table C-3. Federal funds for research and development and for R&D plant, by agency: fiscal years 1998, 1999, and 2000

### [Dollars in millions]

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		Obligations			Outlays	Page 2 of 3
Agency and subdivision	1998	Prelin	ninary	1998	Prelin	ninary
		1999	2000		1999	2000
Department of the Interior, total	533.5	565.2	585.7	566.9	593.7	575.5
Bureau of Reclamation	8.8	8.1	9.9	8.8	8.1	9.9
Geological Survey Minerals Management Service	464.1 30.8	497.2 30.2	514.3 29.7	499.9 28.4	526.2 29.7	503.9 29.9
National Park Service	29.7	29.7	31.8	29.7	29.7	31.8
Department of Justice, total	100.6	110.2	81.8	73.2	75.5	63.0
Bureau of Prisons	8.1	7.8	8.0	8.1	7.8	8.0
Federal Bureau of Investigation	35.8	36.2	36.2	35.8	36.2	36.2
Immigration & Naturalization Service	.0	.5	.5	.0	.5	.5
Office of Justice Programs	56.7	65.7	37.1	29.3	31.0	18.3
Department of Labor, total	27.8 12.4	26.7 12.4	25.9 12.4	25.2 12.4	23.7 12.4	27.3 12.4
Employment & Training Administration	7.2	6.6	4.4	4.7	3.7	5.8
Occupational Safety & Health Administration	4.6	5.0	5.3	4.6	5.0	5.2
Office of the Secretary	.2	.2	.2	.2	.2	.2
Pension Benefit Guaranty Corporation	.6	.7	.7	.6	.7	.7
Pension & Welfare Benefits Administration	2.7	1.8	3.0	2.7	1.8	3.0
Department of State <sup>3</sup>	.9	1.0	1.0	.5	.6	.6
Department of Transportation, total	583.7	717.5	943.4	537.3	535.7	788.9
Coast Guard	20.7	18.2	22.9	20.1	21.6	21.6
Federal Highway Administration	242.3 229.3	225.5 355.6	246.5 559.7	229.5 210.4	231.0 185.8	237.7 424.2
Federal Highway AdministrationFederal Railroad Administration	22.6	26.2	24.4	23.0	28.7	30.7
Federal Transit Administration	17.6	22.2	19.2	10.2	14.5	14.1
National Highway Traffic Safety Admin	41.6	50.4	58.7	33.3	40.3	47.0
Office of the Secretary	3.4	9.6	4.5	3.7	4.5	5.3
Research & Special Programs Administration	6.3	9.7	7.5	7.2	9.2	8.2
Department of the Treasury, total	65.2	72.2	86.4	65.2	71.4	86.0
Bureau of Engraving & Printing	2.8	2.4	2.4	2.8	2.4	2.4
Internal Revenue Service Office of Thrift Supervision	52.0	58.8 .8	73.7 .9	52.0 .7	58.8 .8	73.7 .9
United States Customs Service	.7 9.2	9.0	.9 8.4	9.2	9.0	.9 8.4
United States MintUnited States Secret Service	.1 .5	.7 .5	.5 .6	.1 .5	.0 .5	.1 .6
Department of Veterans Affairs	277.5	320.8	317.0	248.1	310.1	320.1
Other agencies:						
-	7	-	0	_	_	
Appalachian Regional Commission	.7 .0	./	.8 1.3	.7	.7 .1	.8 1.1
Environmental Protection Agency	637.2	661.9	644.9	524.0	594.0	651.0
Federal Communications Commission	3.0	4.2	2.7	3.0	4.2	2.7
Federal Trade Commission	1.1	1.1	1.4	1.1	1.1	1.4
General Services Administration	.0	-	.0	.0	.8	.0
International Development Cooperation		222 -				
Agency, total	212.0 212.0	209.3 209.3	194.1 194.1	212.0 212.0	209.3 209.3	194.1 194.1
Library of Congress	212.0	209.3	194.1	1.6	209.3	194.1
National Aeronautics & Space Administration	9,918.0	9,669.4	9,695.2	9,741.0	9,749.0	9,562.0
National Archives & Records Administration	.1	.1	.1	.1	.1	.1
National Science Foundation	2,473.7	2,714.0	2,889.5	2,302.0	2,334.0	2,634.0
Nuclear Regulatory Commission	51.7	49.2	46.6	54.3	49.8	47.2
Smithsonian Institution	123.0 17.4	126.0 53.7	133.0 36.9	115.5 17.4	118.0 53.7	125.0 36.9
Tennessee Valley Authority	2.7	.0	.0	2.7	.0	.0
Tames and Training			.0	2.1		
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## Table C-3. Federal funds for research and development and for R&D plant, by agency: fiscal years 1998, 1999, and 2000

#### [Dollars in millions]

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Agency and subdivision		Obligations		Outlays		
	1998 Pre		Preliminary		Preliminary	
		1999	2000		1999	2000
United States Arms Control & Disarmament Agency <sup>3</sup> United States Information Agency United States International Trade Commission	1.2 .3 7.2	0.1 .1 6.9	.0 0.1 7.1	1.2 .2 7.2	0.1 .1 6.9	.0 0.1 7.1

- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** - = Amount less than 50 thousand dollars

# Table C-4. Federal funds for total research and development, by agency: fiscal years 1998, 1999, and 2000

## [Dollars in millions]

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		Obligations		Outlays			
Agency and subdivision	1998	Prelim	inary	1998	Prelim	inary	
		1999	2000		1999	2000	
Total, all agencies	71,903.3	75,351.3	75,104.3	70,434.5	73,407.9	73,000.0	
Departments:							
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Health Inspection Service Cooperative State Rsch, Ed, & Extension Svc	1,441.0	1,637.2	1,597.7	1,379.5	1,496.6	1,514.1	
	4.7	4.7	5.0	4.2	4.8	5.0	
	757.9	832.9	855.9	687.1	775.4	808.1	
	20.5	20.0	20.0	20.5	20.0	20.0	
	386.4	506.2	451.0	412.7	432.5	423.4	
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers & Stockyards Admin	71.5	65.0	55.6	55.0	55.9	47.8	
	.2	.2	.2	.2	.2	.2	
	1.4	1.4	1.4	1.4	1.4	1.4	
	187.8	197.4	197.4	188.0	197.0	197.0	
	2.7	2.7	3.4	2.7	2.7	3.4	
National Agricultural Statistics Service Rural Business-Cooperative Service	3.3	3.2	3.2	3.3	3.2	3.2	
	4.4	3.5	4.5	4.4	3.5	4.5	
Department of Commerce, total Bureau of the Census Economic Development Administration National Institute of Standards & Technology National Oceanic & Atmospheric Administration Nat'l Telecommunications & Information Admin	948.6	1,044.6	1,026.0	994.1	1,052.1	1,015.7	
	8.6	16.3	8.3	8.6	16.3	8.3	
	.6	.6	.6	.6	.6	.6	
	394.4	444.2	459.2	439.8	451.6	448.9	
	519.5	559.4	531.7	519.6	559.4	531.7	
	25.5	24.2	26.3	25.5	24.2	26.3	
Department of Defense, total  Department of the Air Force  Department of the Army, total  Department of the Army, Civil Functions  Department of the Army, Military Functions	35,286.2	35,636.9	34,441.2	35,490.6	36,128.4	33,461.7	
	13,839.1	13,523.7	14,360.2	14,242.5	13,968.5	13,342.5	
	5,037.7	5,181.2	4,501.1	4,916.3	5,297.7	4,588.0	
	39.4	37.8	44.8	39.4	37.8	44.8	
	4,998.3	5,143.4	4,456.3	4,876.9	5,259.9	4,543.2	
Department of the Navy Defense Agencies, total Ballistic Missile Defense Organization Defense Advanced Research Projects Agency Defense Information Systems Agency	8,156.3	8,704.9	8,214.6	8,015.2	8,631.5	8,199.4	
	7,980.8	7,958.7	7,086.8	8,038.4	7,942.6	7,051.9	
	3,421.5	3,823.4	2,944.4	3,414.5	3,819.5	2,941.9	
	2,003.1	1,914.2	1,993.0	2,067.3	1,976.7	1,962.2	
	55.6	110.5	117.3	49.1	77.1	106.3	
Defense Logistics Agency Defense Threat Reduction Agency  Joint Staff Special Operations Command Washington Headquarters Services	122.1	71.7	37.2	55.8	63.5	52.7	
	275.8	307.0	349.8	239.4	302.9	337.2	
	53.9	161.2	49.1	53.9	161.2	49.1	
	142.7	207.3	191.9	183.0	170.4	190.0	
	1,906.0	1,363.2	1,404.1	1,975.4	1,371.3	1,412.4	
Operational Test & Evaluation, DirectorTest & Evaluation, Deputy Under Sec of Defense	30.3	31.8	25.4	27.8	37.0	26.4	
	242.0	236.6	253.1	250.4	251.1	253.5	
Department of Education	204.5	221.8	272.1	192.0	212.9	267.5	
Department of Energy	5,873.8	6,499.2	6,518.2	5,876.7	6,390.0	6,716.9	
Department of Health & Human Services, total  Administration on Aging  Administration for Children & Families  Agency for Health Care Policy & Research  Centers for Disease Control & Prevention	13,704.2	15,629.4	16,147.5	12,629.5	14,007.6	15,500.7	
	10.4	18.4	18.4	10.4	18.4	18.4	
	23.5	18.8	28.0	15.8	14.6	21.6	
	146.5	171.0	206.3	77.0	101.0	90.0	
	343.6	382.6	468.6	343.6	382.6	468.6	
Food & Drug Administration  Health Care Financing Administration  Health Resources & Services Administration  National Institutes of Health  Office of the Secretary, total	142.9	141.2	151.7	142.9	141.2	151.7	
	51.2	50.0	55.0	51.3	50.0	55.0	
	12.9	13.0	13.1	12.9	13.0	13.1	
	12,880.2	14,740.7	15,107.9	11,892.5	13,194.4	14,585.3	
	17.0	17.7	18.5	7.0	16.4	17.0	
Office of the Asst Sec, Planning & Evaluation	13.9	14.0	14.0	5.0	14.0	14.0	
	3.1	3.7	4.5	2.0	2.4	3.0	
	76.0	76.0	80.0	76.0	76.0	80.0	
Department of Housing & Urban Development	28.0	59.4	50.6	31.6	42.4	52.5	

# Table C-4. Federal funds for total research and development, by agency: fiscal years 1998, 1999, and 2000

### [Dollars in millions]

Page 2 of 3

		Obligations		Outlays			
Agency and subdivision	1998	Prelin	ninary	1998	Prelim	inary	
		1999	2000		1999	2000	
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	532.0 8.8 464.1 29.3 29.7	564.1 8.1 497.2 29.1 29.7	584.6 9.9 514.3 28.6 31.8	565.3 8.8 499.9 26.8 29.7	592.4 8.1 526.2 28.4 29.7	574.3 9.9 503.9 28.7 31.8	
Department of Justice, total	100.6 8.1 35.8 .0 56.7	110.2 7.8 36.2 .5 65.7	81.8 8.0 36.2 .5 37.1	73.2 8.1 35.8 .0 29.3	75.5 7.8 36.2 .5 31.0	63.0 8.0 36.2 .5 18.3	
Department of Labor, total Bureau of Labor Statistics Employment & Training Administration Occupational Safety & Health Administration Office of the Secretary	27.8 12.4 7.2 4.6 .2	26.7 12.4 6.6 5.0	25.9 12.4 4.4 5.3 .2	25.2 12.4 4.7 4.6 .2	23.7 12.4 3.7 5.0	27.3 12.4 5.8 5.2	
Pension Benefit Guaranty Corporation Pension & Welfare Benefits Administration	.6 2.7	.7 1.8	.7 3.0	.6 2.7	.7 1.8	.7 3.0	
Department of State <sup>3</sup>	.9	1.0	1.0	.5	.6	.6	
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	566.1 20.4 228.0 227.3 21.5	702.1 18.0 211.3 355.6 25.4	929.8 22.7 233.7 559.7 23.9	516.0 19.9 210.5 209.3 22.0	518.2 21.3 215.0 185.3 28.0	773.3 21.4 223.5 423.4 30.3	
Federal Transit Administration National Highway Traffic Safety Admin Office of the Secretary Research & Special Programs Administration	17.6 41.6 3.4 6.3	22.2 50.4 9.6 9.7	19.2 58.7 4.5 7.5	10.2 33.3 3.7 7.2	14.5 40.3 4.5 9.2	14.1 47.0 5.3 8.2	
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	65.1 2.8 52.0 .7 9.0	72.0 2.4 58.8 .8 8.8	86.3 2.4 73.7 .9 8.3	65.1 2.8 52.0 .7 9.0	71.3 2.4 58.8 .8 8.8	85.9 2.4 73.7 .9 8.3	
United States Mint United States Secret Service	.1 .5	.7 .5	.5 .6	.1 .5	.0 .5	.1 .6	
Department of Veterans Affairs	277.1	320.5	316.0	246.9	304.0	314.9	
Other agencies:							
Appalachian Regional Commission  Consumer Product Safety Commission  Environmental Protection Agency Federal Communications Commission Federal Trade Commission	.7 .0 571.2 3.0 1.1	.7 .1 555.9 4.2 1.1	.8 1.3 534.9 2.7 1.4	.7 - 503.0 3.0 1.1	.7 .1 505.0 4.2 1.1	.8 1.1 537.0 2.7 1.4	
International Development Cooperation Agency, total	212.0 212.0 1.5 9,568.0	209.3 209.3 2.1 9,308.0	194.1 194.1 1.8 9,370.3	212.0 212.0 1.6 9,421.0	209.3 209.3 2.0 9,419.0 .1	194.1 194.1 1.8 9,242.0	
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority	2,289.3 51.7 120.0 17.4 2.7	2,512.9 49.2 122.0 53.7 .0	2,698.3 46.6 129.0 36.9	2,010.0 54.3 113.0 17.4 2.7	2,125.0 49.8 115.0 53.7	2,437.0 47.2 122.0 36.9	

## Table C-4. Federal funds for total research and development, by agency: fiscal years 1998, 1999, and 2000

#### [Dollars in millions]

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Agency and subdivision		Obligations		Outlays		
	Preliminary		minary 1998		Preliminary	
		1999	2000		1999	2000
United States Arms Control & Disarmament Agency <sup>3</sup> United States Information Agency United States International Trade Commission	1.2 .3 7.2	0.1 .1 6.9	.0 0.1 7.1	1.2 .2 7.2	0.1 .1 6.9	.0 0.1 7.1

- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** - = Amount less than 50 thousand dollars

# Table C-5. Federal obligations for total research and development, by agency and character of work: fiscal year 1998

### [Dollars in thousands]

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						Page 1 of 3
		Rese	earch		Development	
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	71,903,293	15,613,012	15,309,257	40,981,024	NA	NA
Departments:						
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Health Inspection Service Cooperative State Rsch, Ed, & Extension Svc	4,721 757,945 20,462	603,763 0 401,711 0 163,451	730,142 4,018 288,019 0 222,994	107,141 703 68,215 20,462 0	NA NA NA NA	NA NA NA NA
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers & Stockyards Admin	190 1,422 187,800	7,155 125 924 29,300 0	64,392 0 498 143,000 549	0 65 0 15,500 2,196	NA NA NA NA NA	NA NA NA NA
National Agricultural Statistics Service		1,097 0	2,236 4,436	0	NA NA	NA NA
Department of Commerce, total Bureau of the Census Economic Development Administration National Institute of Standards & Technology National Oceanic & Atmospheric Administration Nat'l Telecommunications & Information Admin	8,562 557 394,367 519,544	39,593 550 0 38,636 407 0	767,400 4,616 557 266,740 491,721 3,766	141,585 3,396 0 88,991 27,416 21,782	NA NA NA NA NA	NA NA NA NA NA
Department of Defense, total  Department of the Air Force  Department of the Army, total  Department of the Army, Civil Functions 1  Department of the Army, Military Functions	13,839,050 5,037,735 39,446	1,030,839 185,564 181,955 4,861 177,094	2,939,052 551,315 635,886 18,814 617,072	31,316,332 13,102,171 4,219,894 15,771 4,204,123	NA 1,431,316 NA NA 682,478	NA 11,670,855 NA NA 3,521,645
Department of the Navy Defense Agencies, total Ballistic Missile Defense Organization Defense Advanced Research Projects Agency Defense Information Systems Agency	7,980,779 3,421,454 2,003,109	328,975 334,345 0 78,259 0	493,183 1,258,668 126,801 778,009 1,094	7,334,117 6,387,766 3,294,653 1,146,841 54,544	515,810 2,879,206 996,052 1,061,711 0	6,818,307 3,508,560 2,298,601 85,130 54,544
Defense Logistics Agency Defense Threat Reduction Agency <sup>2</sup> Joint Staff Special Operations Command Washington Headquarters Services	275,777 53,945 142,692	0 0 0 0 256,086	8,016 205,073 0 15,696 123,979	114,122 70,704 53,945 126,996 1,525,961	105,704 70,704 53,945 52,796 538,294	8,418 0 0 74,200 987,667
Operational Test & Evaluation, Director Test & Evaluation, Deputy Under Sec of Defense		0	0 0	30,339 242,045	0 0	30,339 242,045
Department of Education	204,455	2,063	146,679	55,713	NA	NA
Department of Energy	5,873,804	2,028,805	1,758,706	2,086,293	NA	NA
Department of Health & Human Services, total Administration on Aging Administration for Children & Families Agency for Health Care Policy & Research Centers for Disease Control & Prevention	10,426 23,456	7,355,363 0 0 0 0	4,663,111 2,435 23,456 138,798 343,559	1,685,758 7,991 0 7,700 0	NA NA NA NA NA	NA NA NA NA
Food & Drug Administration  Health Care Financing Administration  Health Resources & Services Administration  National Institutes of Health  Office of the Secretary, total		0 0 1,050 7,354,313 0	142,937 51,236 11,875 3,934,867 13,948	0 0 0 1,591,023 3,054	NA NA NA NA NA	NA NA NA NA
Off of the Asst Sec, Planning & Evaluation Office of Public Health & Science Substance Abuse & Mental Health Svcs Admin <sup>3</sup>	13,948 3,054 75,990	0 0 0	13,948 0 0	0 3,054 75,990	NA NA NA	NA NA NA
Department of Housing & Urban Development	28,007	0	9,211	18,796	NA	NA

# Table C-5. Federal obligations for total research and development, by agency and character of work: fiscal year 1998

### [Dollars in thousands]

Page 2 of 3

		Research		Development		
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
Department of the Interior, total	531,969	48,733	454,119	29,117	NA	N/
Bureau of Reclamation	8,835	0	6,626	2,209	NA	N/
Geological Survey	464,106	48,187	389,011	26,908	NA NA	N/
Minerals Management Service  National Park Service	29,286 29,742	546	29,286 29,196	0	NA NA	N/ N/
	100,578	16,000	26,005		NA	N/
Department of Justice, total	8,110	0	4,326	58,573 3,784	NA NA	N/
Federal Bureau of Investigation	35,812	ŏ	0	35,812	NA NA	N.
Office of Justice Programs	56,656	16,000	21,679	18,977	NA	N.
Department of Labor, total	27,761	11,100	10,979	5,682	NA	N.
Bureau of Labor Statistics	12,400	11,100	1,300	0	NA	N
Employment & Training Administration	7,222	0	2,197	5,025	NA	N.
Occupational Safety & Health Administration	4,592 200	0	4,592 95	0 105	NA NA	N N
Office of the Secretary	200	U U	93		INA	IN.
Pension Benefit Guaranty Corporation	607	0	_55	552	NA	N.
Pension & Welfare Benefits Administration	2,740	0	2,740	0	NA	N.
Department of State <sup>4</sup>	852	0	852	0	NA	N
Department of Transportation, total	566,117	34,971	366,075	165,071	NA	N
Coast Guard	20,439	0	5,110	15,329	NA NA	N
Federal Aviation AdministrationFederal Highway Administration	227,981 227,269	0 34,971	151,550 134,634	76,431 57,664	NA NA	N N
Federal Railroad Administration	21,503	0	21,191	31,004	NA NA	N
Federal Transit Administration	17,583	0	7,400	10,183	NA	N
National Highway Traffic Safety Admin	41,621	0	41,621	0	NA	N
Office of the Secretary	3,433	0	0	3,433	NA	N
Research & Special Programs Administration	6,288	0	4,569	1,719	NA	N
Department of the Treasury, total	65,068	34	52,519	12,515	NA	N
Bureau of Engraving & Printing	2,799	34	2,642	123	NA NA	N
Internal Revenue Service	52,028	0	47,942	4,086	NA NA	N
Office of Thrift Supervision	684 9,026	0	684 776	8,250	NA NA	N N
United States MintUnited States Secret Service	56 475	0	0 475	56 0	NA NA	N N
Department of Veterans Affairs	277,094	120,015	149,051	8,028	NA	N
Other agencies:						
Appalachian Regional Commission	680	0	680	0	NA	N
Environmental Protection Agency	571,200	57,400	419,800	94,000	NA	N
Federal Communications Commission	3,025	0	3,025	0	NA	N
Federal Trade Commission	1,144	0	1,144	0	NA NA	N
International Development Cooperation Agency, total	212,032	1,815	171,108	39,109	NA	N
Agency for International Development <sup>5</sup>	212,032	1,815	171,108	39,109	NA	N
Library of Congress	1,542	1,5.5	455	1,087	NA NA	N
National Aeronautics & Space Administration	9,568,029	2,023,793	2,389,858	5,154,378	NA	N
National Archives & Records Administration	120	0	120	0	NA	N
National Science Foundation	2,289,337	2,118,677	170,660	0	NA	N
Nuclear Regulatory Commission	51,700	0	51,700	0	NA	N
Smithsonian Institution	120,000	120,000	17 422	0	NA NA	N
Tennessee Valley Authority	17,422 2,655	48	17,422 761	0 1,846	NA NA	N N
remiessee valley Authority	2,005	48	101	1,046	NA	IN

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-5. Federal obligations for total research and development, by agency and character of work: fiscal year 1998

#### [Dollars in thousands]

Page 3 of 3

	Total	Research		Development		
Agency and subdivision		Basic	Applied	Total	Advanced technology	Major systems
United States Arms Control & Disarmament Agency <sup>4</sup> United States Information Agency United States International Trade Commission	1,200 258 7,165	0 0 0	1,200 258 7,165	0 0 0	NA NA NA	NA NA NA

- The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- 3 Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** NA = Not applicable (data are not collected in this category for this agency)

# Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

### [Dollars in thousands]

Page 1 of 3

						Page 1 of 3
		Rese	earch		Development	
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	75,351,321	17,366,858	16,454,828	41,529,635	NA	NA
Departments:						
Department of Agriculture, total Agricultural Marketing Service	1,637,229 4,696	715,731 0	800,701 4,000	120,797 696	NA NA	NA NA
Agricultural Research Service	832,903	449,768	308,174	74,961	NA	NA
Animal & Plant Health Inspection Service	19,979 506,189	0 227,657	0 278,532	19,979	NA NA	NA NA
			,	Ü		
Economic Research Service	64,966 190	6,497 125	58,469 0	0 65	NA NA	NA NA
Foreign Agricultural Service	1,422	924	498	0	NA NA	NA NA
Forest Service	197,400	29,700	144,800	22,900	NA	NA
Grain Inspection Packers & Stockyards Admin	2,745	0	549	2,196	NA	NA
National Agricultural Statistics Service	3,221 3,518	1,060 0	2,161 3,518	0 0	NA NA	NA NA
Department of Commerce, total	1,044,573	45,673	836,286	162,614	NA	NA
Bureau of the Census	16,332	1,049	8,805	6,478	NA	NA
Economic Development Administration	550 444,164	0 40,765	550 289,600	0 113,799	NA NA	NA NA
National Institute of Standards & Technology National Oceanic & Atmospheric Administration	559.373	3,859	533,448	22.066	NA NA	NA NA
Nat'l Telecommunications & Information Admin	24,154	0,000	3,883	20,271	NA	NA
Department of Defense, total	35,636,915	1,030,259	3,111,671	31,494,985	NA	NA
Department of the Air Force	13,523,730	195,251	557,335	12,771,144	585,768	12,185,376
Department of the Army, total	5,181,213	178,913	699,293	4,303,007	NA	NA
Department of the Army, Civil Functions 1	37,824	3,000	20,950	13,874	NA 707 476	NA 2 501 657
Department of the Army, Military Functions	5,143,389	175,913	678,343	4,289,133	787,476	3,501,657
Department of the Navy	8,704,932	344,564	551,006	7,809,362	594,793	7,214,569
Defense Agencies, total	7,958,658	311,531	1,304,037	6,343,090	3,759,767	2,583,323
Ballistic Missile Defense Organization  Defense Advanced Research Projects Agency	3,823,401 1,914,227	0 56,391	115,170 880,155	3,708,231 977,681	1,973,373 896,434	1,734,858 81,247
Defense Information Systems Agency	110,521	0	2,389	108,132	030,434	108,132
Defense Logistics Agency	71,737	0	8,151	63,586	55,736	7,850
Defense Threat Reduction Agency <sup>2</sup>	307,024	0	183,996	123,028	123,028	0
	161,241	0	0	161,241	161,241	0
Special Operations Command	207,296 1,363,211	0 255,140	18,657 95,519	188,639 1,012,552	78,772 471,183	109,867 541,369
-						
Operational Test & Evaluation, Director Test & Evaluation, Deputy Under Sec of Defense	31,759 236,623	0	0 0	31,759 236,623	0 0	31,759 236,623
Department of Education	221,811	2,050	151,867	67,894	NA	NA
Department of Energy	6,499,178	2,230,019	1,900,115	2,369,044	NA	NA
Department of Health & Human Services, total	15,629,354	8,428,388	5,268,696	1,932,270	NA	NA
Administration on Aging	18,426	0	1,160	17,266	NA	NA
Administration for Children & Families	18,789	0	18,789	0	NA	NA
Agency for Health Care Policy & Research	171,023 382,559	0	160,923 382,559	10,100 0	NA NA	NA NA
Food & Drug Administration	141,229	0	141,229	0	NA	NA
Health Care Financing Administration	50,000	0	50,000	0	NA NA	NA NA
Health Resources & Services Administration	12,957	1,102	11,855	0	NA	NA
National Institutes of Health	14,740,710	8,427,286	4,488,181	1,825,243	NA	NA
Office of the Secretary, total	17,671	0	14,000	3,671	NA	NA
Off of the Asst Sec, Planning & Evaluation	14,000	0	14,000	0	NA	NA
Office of Public Health & Science	3,671	0	0	3,671	NA	NA
Substance Abuse & Mental Health Svcs Admin <sup>3</sup>	75,990	0	0	75,990	NA	NA
Department of Housing & Urban Development	59,443	0	21,313	38,130	NA	NA

# Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

### [Dollars in thousands]

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		Research		Development			
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems	
Department of the Interior, total  Bureau of Reclamation	564,106 8,067	50,829	483,145 6,050	30,132 2,017	NA NA	NA NA	
Geological Survey Minerals Management Service National Park Service	497,239	50,279	418,845	28,115	NA	NA	
	29,056	0	29,056	0	NA	NA	
	29,744	550	29,194	0	NA	NA	
Department of Justice, total	110,151	20,075	29,443	60,633	NA	NA	
	7,833	0	3,950	3,883	NA	NA	
Federal Bureau of Investigation Immigration & Naturalization Service Office of Justice Programs	36,160	0	0	36,160	NA	NA	
	500	0	0	500	NA	NA	
	65,658	20,075	25,493	20,090	NA	NA	
Department of Labor, total Bureau of Labor Statistics	26,672	11,100	10,267	5,305	NA	NA	
	12,400	11,100	1,300	0	NA	NA	
Employment & Training Administration Occupational Safety & Health Administration Office of the Secretary	6,579	0	2,000	4,579	NA	NA	
	5,010	0	5,010	0	NA	NA	
	200	0	100	100	NA	NA	
Pension Benefit Guaranty Corporation	683	0	57	626	NA	NA	
Pension & Welfare Benefits Administration	1,800	0	1,800	0	NA	NA	
Department of State <sup>4</sup>	964	0	964	0	NA	NA	
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration	702,104	39,897	450,645	211,562	NA	NA	
	17,963	0	4,491	13,472	NA	NA	
	211,254	0	150,000	61,254	NA	NA	
	355,587	39,897	210,725	104,965	NA	NA	
Federal Railroad Administration  Federal Transit Administration  National Highway Traffic Safety Admin	25,413 22,218 50,350	0	25,113 4,100 50,350	300 18,118 0	NA NA NA	NA NA NA	
Office of the SecretaryResearch & Special Programs Administration	9,631	0	0	9,631	NA	NA	
	9,688	0	5,866	3,822	NA	NA	
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	72,042 2,368 58,807 766 8,845	38 38 0 0	60,665 2,198 55,496 766 1,679	11,339 132 3,311 0 7,166	NA NA NA NA	NA NA NA NA	
United States Mint	730	0	0	730	NA	NA	
	526	0	526	0	NA	NA	
Department of Veterans Affairs	320,477	139,855	171,294	9,328	NA	NA	
Other agencies:							
Appalachian Regional Commission Consumer Product Safety Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	738 140 555,863 4,178 1,097	0 0 75,663 0 0	738 0 387,200 4,178 1,097	0 140 93,000 0 0	NA NA NA NA NA	NA NA NA NA	
International Development Cooperation Agency, totalAgency for International Development <sup>5</sup>	209,259	60	163,160	46,039	NA	NA	
	209,259	60	163,160	46,039	NA	NA	
Library of Congress  National Aeronautics & Space Administration  National Archives & Records Administration	2,106	0	595	1,511	NA	NA	
	9,308,029	2,122,562	2,310,555	4,874,912	NA	NA	
	120	0	120	0	NA	NA	
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	2,512,892	2,332,659	180,233	0	NA	NA	
	49,201	0	49,201	0	NA	NA	
	122,000	122,000	0	0	NA	NA	
	53,656	0	53,656	0	NA	NA	

## Table C-6. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 1999

#### [Dollars in thousands]

Page 3 of 3

		Research		Development		
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
United States Arms Control & Disarmament Agency <sup>4</sup> United States Information Agency United States International Trade Commission	50 100 6,873	0 0 0	50 100 6,873	0 0 0	NA NA NA	NA NA NA

- The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** NA = Not applicable (data are not collected in this category for this agency)

# Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 2000

### [Dollars in thousands]

Page 1 of 3

						Page 1 of 3
		Rese	earch		Development	
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
Total, all agencies	75,104,342	18,209,439	16,470,143	40,424,760	NA	NA
Departments:						
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Health Inspection Service Cooperative State Rsch, Ed, & Extension Svc	1,597,721 5,017 855,868 20,033 451,032	718,941 0 462,169 0 219,400	755,277 4,268 316,671 0 231,632	123,503 749 77,028 20,033 0	NA NA NA NA NA	NA NA NA NA
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers & Stockyards Admin	55,628 190 1,422 197,400 3,410	5,563 125 924 29,700 0	50,065 0 498 144,800 682	0 65 0 22,900 2,728	NA NA NA NA	NA NA NA NA
National Agricultural Statistics ServiceRural Business-Cooperative Service	3,221 4,500	1,060 0	2,161 4,500	0 0	NA NA	NA NA
Department of Commerce, total Bureau of the Census Economic Development Administration National Institute of Standards & Technology National Oceanic & Atmospheric Administration Nat'l Telecommunications & Information Admin	1,025,978 8,272 550 459,158 531,702 26,296	44,780 531 0 40,335 3,914 0	814,958 4,460 550 299,272 504,482 6,194	166,240 3,281 0 119,551 23,306 20,102	NA NA NA NA NA	NA NA NA NA NA
Department of Defense, total  Department of the Air Force Department of the Army, total  Department of the Army, Civil Functions 1 Department of the Army, Military Functions	34,441,249 14,360,234 4,501,085 44,799 4,456,286	1,115,141 209,528 189,515 2,800 186,715	3,001,119 513,837 582,300 23,400 558,900	30,324,989 13,636,869 3,729,270 18,599 3,710,671	NA 662,005 NA NA 531,330	NA 12,974,864 NA NA 3,179,341
Department of the Navy Defense Agencies, total Ballistic Missile Defense Organization Defense Advanced Research Projects Agency Defense Information Systems Agency	8,214,614 7,086,797 2,944,448 1,992,976 117,253	375,832 340,266 0 62,609 0	526,418 1,378,564 74,831 954,772 1,966	7,312,364 5,367,967 2,869,617 975,595 115,287	523,944 2,839,241 1,110,250 894,326 0	6,788,420 2,528,726 1,759,367 81,269 115,287
Defense Logistics Agency	37,236 349,832 49,073 191,882 1,404,097	0 0 0 0 277,657	8,261 204,689 0 17,269 116,776	28,975 145,143 49,073 174,613 1,009,664	24,001 145,143 49,073 72,916 543,532	4,974 0 0 101,697 466,132
Operational Test & Evaluation, DirectorTest & Evaluation, Deputy Under Sec of Defense	25,415 253,104	0 0	0	25,415 253,104	0	25,415 253,104
Department of Education	272,142	2,010	170,886	99,246	NA	NA
Department of Energy	6,518,213	2,285,784	2,087,458	2,144,971	NA	NA
Department of Health & Human Services, total Administration on Aging Administration for Children & Families Agency for Health Care Policy & Research Centers for Disease Control & Prevention	16,147,486 18,426 28,049 206,255 468,559	8,588,895 0 0 0 0	5,511,350 1,085 28,049 197,255 468,559	2,047,241 17,341 0 9,000 0	NA NA NA NA NA	NA NA NA NA
Food & Drug Administration	151,745 55,000 13,081 15,107,871 18,500	0 0 1,157 8,587,738 0	151,745 55,000 11,924 4,583,733 14,000	0 0 0 1,936,400 4,500	NA NA NA NA	NA NA NA NA
Off of the Asst Sec, Planning & Evaluation Office of Public Health & Science Substance Abuse & Mental Health Svcs Admin <sup>3</sup>	14,000 4,500 80,000	0 0 0	14,000 0 0	0 4,500 80,000	NA NA NA	NA NA NA
Department of Housing & Urban Development	50,625	0	18,054	32,571	NA	NA

# Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 2000

### [Dollars in thousands]

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		Rese	earch		Development	1 age 2 01 3
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
Department of the Interior, total  Bureau of Reclamation	584,626 9,915	51,906	500,152 7,436	32,568 2,479	NA NA	NA NA
Geological Survey Minerals Management Service National Park Service	514,316	51,356	432,871	30,089	NA	NA
	28,565	0	28,565	0	NA	NA
	31,830	550	31,280	0	NA	NA
Department of Justice, total	81,828	15,200	9,841	56,787	NA	NA
	7,984	0	4,000	3,984	NA	NA
Federal Bureau of InvestigationImmigration & Naturalization ServiceOffice of Justice Programs	36,208	0	0	36,208	NA	NA
	500	0	0	500	NA	NA
	37,136	15,200	5,841	16,095	NA	NA
Department of Labor, total  Bureau of Labor Statistics	25,933	11,100	11,041	3,792	NA	NA
	12,400	11,100	1,300	0	NA	NA
Employment & Training Administration Occupational Safety & Health Administration Office of the Secretary	4,379	0	1,331	3,048	NA	NA
	5,255	0	5,255	0	NA	NA
	200	0	100	100	NA	NA
Pension Benefit Guaranty CorporationPension & Welfare Benefits Administration	699	0	55	644	NA	NA
	3,000	0	3,000	0	NA	NA
Department of State <sup>4</sup>	964	0	964	0	NA	NA
Department of Transportation, total	929,804	67,623	607,936	254,245	NA	NA
	22,667	0	5,667	17,000	NA	NA
Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	233,657	0	173,000	60,657	NA	NA
	559,657	67,623	338,401	153,633	NA	NA
	23,901	0	23,601	300	NA	NA
Federal Transit Administration  National Highway Traffic Safety Admin  Office of the Secretary  Research & Special Programs Administration	19,225	0	4,100	15,125	NA	NA
	58,713	0	58,713	0	NA	NA
	4,475	0	0	4,475	NA	NA
	7,509	0	4,454	3,055	NA	NA
Department of the Treasury, total  Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision	86,253	28	74,817	11,408	NA	NA
	2,424	28	2,286	110	NA	NA
	73,652	0	70,217	3,435	NA	NA
	855	0	855	0	NA	NA
United States Customs Service	8,283	0	900	7,383	NA	NA
United States Mint United States Secret Service	480	0	0	480	NA	NA
	559	0	559	0	NA	NA
Department of Veterans Affairs	316,000	137,500	169,500	9,000	NA	NA
Other agencies:						
Appalachian Regional Commission Consumer Product Safety Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	750 1,314 534,900 2,747 1,379	0 0 78,800 0 0	750 1,168 368,100 2,747 1,379	0 146 88,000 0 0	NA NA NA NA NA	NA NA NA NA
International Development Cooperation Agency, total Agency for International Development <sup>5</sup>	194,074	99	143,474	50,501	NA	NA
	194,074	99	143,474	50,501	NA	NA
Library of Congress	1,844	0	614	1,230	NA	NA
	9,370,333	2,448,845	1,943,166	4,978,322	NA	NA
	120	0	120	0	NA	NA
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration	2,698,326	2,513,787	184,539	0	NA	NA
	46,594	0	46,594	0	NA	NA
	129,000	129,000	0	0	NA	NA
	36,895	0	36,895	0	NA	NA

## Table C-7. Preliminary Federal obligations for total research and development, by agency and character of work: fiscal year 2000

#### [Dollars in thousands]

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		Rese	earch		Development	
Agency and subdivision	Total	Basic	Applied	Total	Advanced technology	Major systems
United States Information Agency United States International Trade Commission	100 7,144	0	100 7,144	0	NA NA	NA NA

- The Department of the Army, Civil Functions (Corps of Engineers) development activities are appropriated by the Energy & Water Development Act and therefore cannot be categorized according to the advanced technology and major systems development breakdown.
- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** NA = Not applicable (data are not collected in this category for this agency)

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1998

									Pa	age 1 of 3
						Extra	mural			
		Intra-			United	States and	territories			
Agency and subdivision	Total	Total mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign
Total, all agencies	71,903.3	17,114.0	31,839.7	1,188.9	13,365.9	3,890.1	3,155.1	603.0	447.5	299.1
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Hith Inspection Svc Cooperative State Research, Education, & Extension Service	1,441.0 4.7 757.9 20.5	996.4 4.4 714.0 16.6	10.9 .0 .0 .0	.0 .0 .0 .0	415.4 .3 38.1 3.8 350.0	.0 .0 .0 .0	12.5 .0 2.7 -	.0 .0 .0 .0	1.8 - - .0 1.2	4.1 .0 3.1 .0
Economic Research Service	71.5	63.1	1.9	.0	5.0	.0	.5	.0	.3	.8
Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers &		.2 1.0 170.2	.0 .0	.0 .0 .0	.0 .5 15.6	.0 .0 .0	.0 .0 1.6	.0 .0 .0	.0 .0 .3	.0 .0 .1
Stockyards Administration	2.7	2.7	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc Rural Business-Cooperative Service	3.3 4.4	3.1 1.2	.0 .0	.0 .0	.2 1.9	.0 .0	1.3	.0 .0	.0 .0	.0 .0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications & Information Administration	948.6 8.6 .6 394.4 519.5	673.8 8.6 .1 226.0 432.2 7.0	151.9 .0 - 148.0 3.9	.0 .0 .0 .0	106.7 .0 .3 19.5 81.1	.0 .0 .0 .0	12.3 .0 .2 .6 2.0	.0 .0 .0 .0	3.7 .0 .0 .0 .3	.2 .0 .0 .2 .0
Department of Defense, research	3,969.9	1,407.9	1,371.6	12.1	964.7	84.4	86.5	17.5	.0	25.3
Dept of Defense, development, total	31,316.3	6,870.9	22,969.8	73.0	457.5	262.8	139.3	290.5	110.4	142.1
Department of Defense, advanced technology development	5,524.6	1,478.7	3,278.2	22.0	277.0	152.2	131.3	65.0	12.6	107.6
Department of Defense, major systems development	25,791.8	5,392.2	19,691.5	51.0	180.5	110.7	8.0	225.5	97.8	34.5
Department of the Air Force, research & development (R&D)	5,037.7 8,156.3 7,980.8	1,529.9 1,864.4 2,900.3 1,752.9 608.4	11,800.1 2,886.7 4,663.0 4,971.0 2,536.6	18.5 2.7 6.8 57.0	116.7 167.9 401.4 736.1	104.5 30.1 42.7 169.9 58.3	15.0 41.8 51.3 117.7	138.7 25.8 61.9 61.1 22.6	110.4 .1 .0 -	5.3 18.2 28.9 115.0 99.5
Defense Advanced Research Projects Agency, R&D	2,003.1	294.8	1,184.9	10.0	350.7	68.7	62.4	24.2	.0	7.4
Defense Information Systems Agency, R&D Defense Logistics Agency, R&D	55.6 122.1	17.1 36.7	32.8 32.8	.5 .0	.0 4.1	.3 .1	.0 47.3	4.9 1.1	.0 .0	.0 .0
Defense Threat Reduction Agency, R&D <sup>2</sup> Joint Staff, R&D	275.8 53.9	70.9 53.9	183.9 .0	4.1 .0	7.3 .0	5.4 .0	.0 .0	.8 .0	.0 .0	3.3 .0
Special Operations Command, R&D Washington Headquarters	142.7	43.2	96.6	1.5	1.4	.0	.0	.0	.0	.0
Services, R&D	1,906.0	627.8	903.5	17.2	300.8	37.2	7.3	7.4	_	4.8
Director Test & Evaluation, R&D, Deputy Under Secretary of Defense	30.3 242.0	7.3 224.2	8.3 12.2	.0	.0	.0	.0	14.8	.0	.0
Department of Education	204.5	9.6	15.3	.0	125.3	.0	53.0	.0	1.3	.0
Department of Energy	5,873.8	463.2	1,286.8	918.2	623.2	2,236.2	80.3	260.5	3.4	2.0

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1998

Page 2 of 3

			Extramural										
		Intra-			United	States and t	territories						
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign			
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Health Care Policy & Rsch Centers for Disease Control &	10.4 23.5 146.5	2,809.4 .5 .9 36.2	758.0 .2 2.1 52.3	163.2 .0 .0	7,728.8 .9 9.9 37.0	30.2 .0 .0	2,005.1 4.9 8.6 20.8	20.5 .0 .0	147.5 3.9 1.9 .0	41.6 .0 -			
Prevention	343.6	239.8	33.3	.0	61.4	.0	3.3	.0	5.8	.0			
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total	142.9 51.2 12.9 12,880.2 17.0	118.8 .4 3.0 2,405.0 4.8	4.1 38.2 .0 626.5 1.3	.0 .0 .0 163.2 .0	14.2 5.3 7.5 7,564.9 5.7	.0 .0 .0 30.2 .0	5.5 6.0 2.4 1,917.9 2.2	.0 .0 .0 20.5	.1 1.1 .0 111.2 3.0	.3 .3 .0 40.7 .0			
Office of the Assistant Secretary, Planning & Evaluation Office of Public HIth & Science Substance Abuse & Mental Health	13.9 3.1	4.5 .3	1.3 .0	.0 .0	2.9 2.8	.0 .0	2.2 .0	.0	3.0 .0	.0 .0			
Services Administration <sup>3</sup>	76.0	-	.0	.0	22.0	.0	33.4	.0	20.5	.0			
Dept of Housing & Urban Development	28.0	17.0	6.5	.0	.7	.0	3.9	.0	.0	.0			
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	532.0 8.8 464.1 29.3 29.7	460.8 6.6 431.0 6.6 16.6	14.0 .0 4.8 7.5 1.7	.0 .0 .0 .0	48.0 1.9 21.4 13.6 11.1	.0 .0 .0 .0	.7 .2 .0 .3 .3	.0 .0 .0 .0	7.3 .2 6.9 .2	1.1 .0 .0 1.1 .0			
Department of Justice, total Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	100.6 8.1 35.8 56.7	39.7 3.0 35.8 .9	12.4 .0 .0 12.4	.0 .0 .0	19.9 .0 .0 19.9	.0 .0 .0	11.3 .0 .0 11.3	.0 .0 .0	17.3 5.1 .0 12.2	.0 .0 .0			
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Health Admin Office of the Secretary	4.6	11.0 8.4 .2 1.7 .1	4.5 .0 .0 2.9	.0 .0 .0 .0	6.3 4.0 2.1 .0	.0 .0 .0 .0	6.0 .0 5.0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0			
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	.6 2.7	.3 .5	.4 1.2	.0 .0	.0	.0 .0	.0 1.0	.0 .0	.0 .0	.0 .0			
Department of State <sup>4</sup>	.9	.3	.5	.0	.0	-	.0	.0	.0	.0			
Department of Transportation, total	566.1 20.4 228.0 227.3 21.5	190.8 12.8 92.6 39.6 9.5	191.1 7.2 117.6 44.0 10.1	4.3 .5 2.2 1.6 .0	37.9 .0 9.4 14.1 .4	3.4 .0 .0 3.4 .0	15.3 .0 .0 9.1 1.4	6.2 .0 6.2 .0	116.5 .0 .0 115.5	.6 .0 .0 .0			
Federal Transit Administration  Nat'l Highway Traffic Safety Admin  Office of the Secretary  Research & Special Programs Admin	17.6 41.6 3.4 6.3	2.3 26.6 3.4 3.9	.0 10.2 .0 2.1	.0 .0 .0	9.9 4.0 .0 .1	.0 .0 .0 .1	4.4 .3 .0 .1	.0 .0 .0	1.0 .0 .0	.0 .4 .0 .0			
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	.7	43.6 2.8 36.9 .7 2.9	21.5 .0 15.1 .0 6.1	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0			
United States Mint United States Secret Service	.1 .5	.3	.1 .2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0			
Department of Veterans Affairs	277.1	277.1	.0	.0	.0	.0	.0	.0	.0	.0			

Table C-8. Federal obligations for total research and development, by agency and performer: fiscal year 1998

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									1.0	age 5 or 5		
						Extra	mural					
		Intra-	United States and territories									
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign		
Other agencies:												
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission International Development Cooperation Agency, total	.7 571.2 3.0 1.1 212.0	255.0 3.0 1.1 22.6	.2 91.3 .0 .0	.0 .0 .0 .0	.4 145.7 .0 .0	.0 .0 .0 .0	.1 61.4 .0 .0	.0 .0 .0 .0	.0 15.4 .0 .0	.0 2.3 .0 .0		
Agcy for International Dvlpmt <sup>5</sup> Library of Congress	212.0 1.5 9,568.0 .1 2,289.3	22.6 .9 2,395.5 .1 17.0	10.7 .6 4,814.1 .0 101.4	.0 .0 4.0 .0	13.6 786.6 .0 1,874.9	.0 .0 1,123.5 .0 139.1	144.1 .0 377.5 .0 144.0	.0 .0 5.9 .0	.0 .0 13.5 .0 3.6	21.1 .0 47.5 .0 9.2		
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agency <sup>4</sup>	51.7 120.0 17.4 2.7	14.3 120.0 2.3 2.7	3.5 .0 2.4 .0	14.1 .0 .0 .0	5.2 .0 5.3 .0	10.5 .0 .0 .0	.4 .0 1.5 .0	1.7 .0 .0 .0	.0 .0 5.8 .0	2.1 .0 .0 .0		
United States Information AgencyUS International Trade Commission	.3 7.2	.3 7.2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0		

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance

- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- 3 Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** - Amount less than 50 thousand dollars

FFRDCs = Federally funded research and development centers

Table C-9. Preliminary Federal obligations for total research and development, by agency and performer: fiscal year 1999

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									Pa	age 1 of 3
						Extra	mural			
		Intra-			United	States and	territories			
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign
Total, all agencies	75,351.3	18,271.6	31,906.1	1,294.6	14,981.6	4,108.0	3,477.4	656.4	414.1	241.6
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant HIth Inspection Svc Cooperative State Research,	1,637.2 4.7 832.9 20.0 506.2	1,070.0 4.7 781.4 16.9 23.0	14.1 .0 .0 .0	.0 .0 .0 .0	536.3 .0 45.5 3.0 461.6	.0 .0 .0 .0	12.0 .0 2.7 -	.0 .0 .0 .0	1.4 .0 - .0	3.4 .0 3.3 .0
Education, & Extension Service										
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers &	65.0 .2 1.4 197.4	55.9 .2 1.0 179.8	.0 .0 .0	.0 .0 .0	9.1 .0 .5 15.6	.0 .0 .0	.0 .0 .0 1.6	.0 .0 .0	.0 .0 .0	.0 .0 .0 .1
Stockyards Administration	2.7	2.7	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc Rural Business-Cooperative Service	3.2 3.5	3.0 1.4	.0 .0	.0 .0	.2 .8	.0 .0	.1 1.3	.0 .0	.0 .0	.0 .0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications & Information Administration	1,044.6 16.3 .6 444.2 559.4	728.2 16.3 .1 234.8 468.5	201.5 .0 .3 197.1 4.1	.0 .0 .0 .0	101.2 .0 .0 11.4 84.9	.1 .0 .0 .1	10.2 .0 .2 .6 1.4	.0 .0 .0 .0	3.1 .0 .0 .0 .3	.2 .0 .0 .2 .0
Department of Defense, research	4,141.9	1,427.6	1,437.0	18.1	1,025.5	75.2	104.4	29.5	2.0	22.6
Dept of Defense, development, total	31,495.0	7,494.2	22,708.6	91.5	467.4	219.3	123.7	298.7	11.6	80.0
Department of Defense, advanced technology development	5,741.7	1,401.2	3,703.8	21.1	294.0	112.0	89.9	60.5	11.5	47.6
Department of Defense, major systems development	25,753.3	6,093.0	19,004.8	70.4	173.3	107.3	33.9	238.1	.1	32.4
Department of the Air Force, research & development (R&D)	7,958.7	1,591.0 1,922.4 3,131.0 2,065.5	11,556.4 2,865.5 4,950.4 4,742.9 2,702.5	18.4 10.7 6.7 73.9	108.8 221.1 434.3 728.8 43.3	72.5 37.8 30.2 154.0 48.7	28.7 70.7 57.1 71.6	129.0 42.3 68.3 62.6	9.6 3.9 - - .0	9.3 6.9 27.1 59.3 43.1
Defense Advanced Research Projects Agency, R&D	1,914.2	269.7	1,116.2	9.9	359.2	68.5	60.2	22.4	.0	8.1
Defense Information Systems Agency, R&D Defense Logistics Agency, R&D	110.5 71.7	47.6 30.8	50.3 35.9	.0 .1	.0 3.3	.3 .0	6.1 .0	6.1 1.6	.0 .0	.0 .0
Defense Threat Reduction Agency, R&D <sup>2</sup> Joint Staff, R&D	307.0 161.2	71.9 161.2	209.9 .0	3.9 .0	10.6 .0	5.8 .0	.0 .0	1.4 .0	.0 .0	3.6 .0
Special Operations Command, R&D Washington Headquarters	207.3	62.8	142.3	1.3	.9	.0	.0	.0	.0	.0
Services, R&D Operational Test & Evaluation, R&D,	1,363.2	495.1	485.7	14.5	311.5	30.7	5.2	15.9	-	4.6
Director Test & Evaluation, R&D, Deputy	31.8	5.2	8.7	.0	.0	.0	.0	17.8	.0	.0
Under Secretary of Defense	236.6	206.8	21.7	.0	.0	.0	.0	8.1	.0	.0
Department of Education	221.8	13.4	14.7	.0	133.4	.0	59.0	.0	1.4	.0
Department of Energy	6,499.2	572.2	1,494.7	970.8	619.9	2,473.0	72.5	290.5	3.8	1.7

Table C-9. Preliminary Federal obligations for total research and development, by agency and performer: fiscal year 1999

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						Extra	mural		Г	age 2 of 3
		Intra-			United	States and	erritories			
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agoy for Health Care Policy & Rsch Centers for Disease Control &	18.4 18.8 171.0	3,028.8 .5 1.2 70.9	855.8 .2 1.8 46.9	189.8 .0 .0	8,960.7 1.3 9.5 34.0	35.1 .0 .0	2,319.6 10.0 5.4 19.0	23.9 .0 .0	167.5 6.4 .8 .0	48.2
Prevention  Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total	382.6 141.2 50.0 13.0 14,740.7 17.7	272.8 117.5 .1 2.7 2,558.8 4.3	39.3 4.0 32.9 .0 728.6 2.0	.0 .0 .0 .0 189.8	61.4 14.0 7.0 7.8 8,797.5 6.4	.0 .0 .0 .0 35.1	3.3 5.4 8.2 2.5 2,230.4 2.0	.0 .0 .0 23.9 .0	5.8 .1 1.5 .0 129.4 3.0	.0 .3 .3 .0 47.3
Office of the Assistant Secretary, Planning & Evaluation Office of Public HIth & Science Substance Abuse & Mental Health Services Administration <sup>3</sup>	14.0 3.7 76.0	4.0 .3	2.0 .0	.0 .0	3.0 3.4 22.0	.0 .0	2.0 .0 33.4	.0 .0 .0	3.0 .0 20.5	.0 .0
Dept of Housing & Urban Development	59.4	31.3	15.0	.0	2.1	.0	11.1	.0	.0	.0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	564.1 8.1 497.2 29.1 29.7	491.5 6.0 461.6 7.2 16.6	14.0 .0 4.8 7.5 1.7	.0 .0 .0 .0	49.1 1.8 24.0 12.2 11.1	.0 .0 .0 .0	.7 .2 .0 .3 .3	.0 .0 .0 .0	7.2 .1 6.9 .2 .0	1.7 .0 .0 1.7
Department of Justice, total	110.2 7.8 36.2 .5 65.7	41.0 3.0 36.2 .2 1.6	16.6 .0 .0 .3 16.3	.0 .0 .0 .0	20.5 .0 .0 .0 20.5	.0 .0 .0 .0	14.3 .0 .0 .0 .0 14.3	.0 .0 .0 .0	17.8 4.8 .0 .0 13.0	.0 .0 .0 .0
Department of Labor, total	26.7 12.4 6.6 5.0	15.1 12.4 .2 1.7 .1	5.0 .0 .0 3.3 .0	.0 .0 .0 .0	2.0 .0 1.9 .0 .1	.0 .0 .0 .0	4.5 .0 4.5 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
Pension Benefit Guaranty CorpPension & Welfare Benefits Admin	.7 1.8	.3 .5	.4 1.3	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of State <sup>4</sup>	1.0	.3	.6	.0	.0	-	.0	.0	.0	.0
Department of Transportation, total	702.1 18.0 211.3 355.6 25.4	224.0 11.7 69.5 80.1 12.8	244.9 5.8 119.7 92.6 10.4	4.9 .4 2.3 2.3 .0	46.1 .0 13.6 14.7 1.8	.6 .0 .0 .4 .0	14.8 .0 .0 8.6 .2	6.2 .0 6.2 .0	159.7 .0 .0 157.0	.7 .0 .0 .0
Federal Transit Administration Nat'l Highway Traffic Safety Admin Office of the Secretary Research & Special Programs Admin	22.2 50.4 9.6 9.7	2.4 32.2 9.6 5.7	.7 12.1 .0 3.7	.0 .0 .0	10.9 5.0 .0	.0 .0 .0	5.5 .5 .0 .1	.0 .0 .0	2.8 .0 .0	.0 .5 .0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	72.0 2.4 58.8 .8 8.8	44.1 2.4 37.6 .8 2.9	27.9 .0 21.2 .0 5.9	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
United States Mint United States Secret Service	.7 .5	.1 .4	.7 .2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Veterans Affairs	320.5	320.5	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

Table C-9. Preliminary Federal obligations for total research and development, by agency and performer:
fiscal year 1999

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						Extra	mural					
		Intra- mural <sup>1</sup>	United States and territories									
Agency and subdivision	Total		Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign		
Other agencies:												
Appalachian Regional Commission	.7 .1 555.9 4.2 1.1	.1 241.6 4.2 1.1	.2 .1 90.5 .0	.0 .0 .0 .0	.4 .0 144.4 .0	.0 .0 .0 .0	.1 .0 60.9 .0	.0 .0 .0 .0	.0 .0 15.2 .0	.0 .0 3.2 .0		
International Development Cooperation Agency, total Agcy for International Dvlpmt <sup>5</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	209.3 209.3 2.1 9,308.0	23.5 23.5 1.2 2,330.5 .1	10.3 10.3 .9 4,609.1	.0 .0 .0 4.0	13.3 13.3 - 786.6 .0	.0 .0 .0 1,143.8	142.2 142.2 .0 367.2	.0 .0 .0 5.9	.0 .0 .0 13.5	20.0 20.0 .0 47.5		
National Science Foundation  Nuclear Regulatory Commission  Smithsonian Institution  Social Security Administration US Arms Control & Disarmament	53.7	18.6 14.5 122.0 4.9	109.0 3.2 .0 32.6	.0 15.4 .0 .0	2,059.8 4.3 .0 8.7	153.1 7.7 .0 .0	158.1 .4 .0 1.6	.2 1.4 .0 .0	4.0 .0 .0 6.0	10.1 2.3 .0 .0		
Agency 4  United States Information Agency US International Trade Commission	.1 .1 6.9	.1 .1 6.9	.0 .0	.0 .0	.0 .0	.0 .0 .0	.0 .0	.0 .0 .0	.0 .0	.0 .0 .0		

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** - = Amount less than 50 thousand dollars

FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

<sup>4</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

<sup>5</sup> Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-10. Preliminary Federal obligations for total research and development, by agency and performer: fiscal year 2000

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									Pa	age 1 of 3
						Extrai	mural			
	United States ar						erritories			
Agency and subdivision	Total	Total mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign
Total, all agencies	75,104.3	17,641.7	31,640.0	1,337.0	15,191.3	4,470.7	3,472.9	670.5	420.1	260.3
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant HIth Inspection Svc Cooperative State Research,	1,597.7 5.0 855.9 20.0	1,099.8 5.0 813.5 17.0	11.3 .0 .0 .0	.0 .0 .0	474.8 .0 37.8 3.0	.0 .0 .0	7.1 .0 1.0 .0	.0 .0 .0	1.2 .0 .0	3.7 .0 3.6 .0
Education, & Extension Service	451.0	24.8	11.2	.0	411.7	.0	2.4	.0	.9	.0
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service Grain Inspection Packers &	55.6 .2 1.4 197.4	50.6 .2 1.0 179.8	.0 .0 .0	.0 .0 .0	5.0 .0 .5 15.6	.0 .0 .0	.0 .0 .0 1.6	.0 .0 .0	.0 .0 .0	.0 .0 .0 .1
Stockyards Administration	3.4	3.4	.0	.0	.0	.0	.0	.0	.0	.0
Nat'l Agricultural Statistics Svc Rural Business-Cooperative Service	3.2 4.5	3.0 1.5	.0 .0	.0 .0	.2 1.0	.0 .0	.1 2.0	.0 .0	.0 .0	.0 .0
Department of Commerce, total	1,026.0 8.3 .6 459.2 531.7	711.5 8.3 .1 238.2 455.7	212.4 .0 .3 208.2 3.9	.0 .0 .0 .0	88.0 .0 .0 11.7 71.1	.0 .0 .0	10.4 .0 .2 .9	.0 .0 .0 .0	3.4 .0 .0 .0 .4	.2 .0 .0 .2 .0
Information Administration	26.3	9.3	.0	.0	5.3	.0	8.7	.0	3.1	.0
Department of Defense, research	4,116.3	1,439.1	1,424.5	17.8	1,032.0	92.2	74.4	12.0	.0	24.3
Dept of Defense, development, total  Department of Defense, advanced technology development	30,325.0 4,575.1	6,438.5 1,045.3	3,042.5	82.8 25.4	351.3 204.1	139.0 47.1	59.6 40.1	326.2 103.1	4.1 3.1	99.1 64.4
Department of Defense, major systems development	25,749.9	5,393.3	19,781.9	57.4	147.2	91.8	19.4	223.1	1.1	34.7
Department of the Air Force, research & development (R&D)  Department of the Army, R&D  Department of the Navy, R&D  Defense Agencies, R&D, total  Ballistic Missile Defense  Organization, R&D	14,360.2 4,501.1 8,214.6 7,086.8 2,944.4	1,415.5 1,504.6 2,959.0 1,775.6	12,657.9 2,804.4 4,687.5 4,070.3 1,997.0	22.1 8.5 6.4 63.7 33.6	126.6 103.1 402.2 751.5	8.2 30.3 30.8 161.8 35.1	4.1 22.3 31.4 76.2	106.3 23.4 71.1 110.6	4.1 .0 .0 -	15.5 4.5 26.3 77.1 59.5
Defense Advanced Research Projects Agency, R&D	1,993.0	275.8	1,156.0	10.4	383.6	72.6	62.8	23.1	.0	8.7
Defense Information Systems Agency, R&D Defense Logistics Agency, R&D	117.3 37.2	53.2 22.9	51.1 11.2	.0 .2	.0 2.8	.3 .0	7.2 .0	5.5 .1	.0 .0	.0 .0
Defense Threat Reduction Agency, R&D <sup>2</sup> Joint Staff, R&D	349.8 49.1	81.3 49.1	239.9 .0	4.3 .0	12.3 .0	6.6 .0	.0 .0	1.6 .0	.0 .0	3.8 .0
Special Operations Command, R&D Washington Headquarters	191.9	58.1	131.7	1.2	.8	.0	.0	.0	.0	.0
Services, R&D Operational Test & Evaluation, R&D,	1,404.1	461.7	483.4	14.0	317.9	47.2	4.5	70.2	-	5.1
Director Test & Evaluation, R&D, Deputy Under Secretary of Defense	25.4 253.1	3.0 219.9	4.5 24.2	.0	.0	.0	.0	17.9 9.0	.0	.0
·	272.1	36.0		.0	.0 151.1	.0				.0
Department of Education			11.8				72.0	.0	1.4	
Department of Energy	6,518.2	666.6	1,185.4	1,018.0	642.2	2,662.9	46.1	292.9	3.0	1.1

Table C-10. Preliminary Federal obligations for total research and development, by agency and performer: fiscal year 2000

### [Dollars in millions]

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									Pa	age 2 of 3
						Extra	mural			
		Intra-			United	States and	territories			
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total	18.4 28.0 206.3	3,225.0 .5 1.1 94.8	884.6 .2 2.7 52.2	194.3 .0 .0	9,181.5 1.4 14.7 37.8	35.9 .0 .0	2,380.8 10.1 8.3 21.1	24.4 .0 .0	171.8 6.3 1.3 .0	49.0 .0 .3
Prevention  Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total	468.6 151.7 55.0 13.1 15,107.9 18.5	357.1 126.2 .1 2.8 2,637.8 4.5	41.1 4.3 36.2 .0 745.8 2.0	.0 .0 .0 .0 194.3	61.4 15.0 7.7 7.8 9,005.6 7.1	.0 .0 .0 .0 35.9	3.3 5.8 9.4 2.5 2,283.2 2.0	.0 .0 .0 .0 24.4 .0	5.8 .1 1.7 .0 132.4 3.0	.0 .3 .0 .0 48.4 .0
Office of the Assistant Secretary, Planning & Evaluation Office of Public HIth & Science Substance Abuse & Mental Health Services Administration <sup>3</sup>	14.0 4.5 80.0	4.0 .5	2.0 .0	.0 .0	3.0 4.1 23.3	.0 .0	2.0 .0 35.3	.0 .0 .0	3.0 .0 21.3	.0 .0
Dept of Housing & Urban Development	50.6	31.4	10.6	.0	1.3	.0	7.2	.0	.0	.0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	584.6 9.9 514.3 28.6 31.8	511.8 7.9 478.5 7.3 18.2	14.6 .0 5.0 7.6 2.0	.0 .0 .0 .0	49.1 1.8 24.0 11.9 11.4	.0 .0 .0 .0	.7 .2 .0 .3 .3	.0 .0 .0 .0	7.2 .1 6.9 .2 .0	1.2 .0 .0 1.2 .0
Department of Justice, total	81.8 8.0 36.2 .5 37.1	39.7 3.0 36.2 .5	8.7 .0 .0 .0 8.7	.0 .0 .0 .0	11.7 .0 .0 .0 11.7	.0 .0 .0 .0	6.6 .0 .0 .0	.0 .0 .0 .0	15.0 5.0 .0 .0 10.0	.0 .0 .0 .0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Health Admin Office of the Secretary	25.9 12.4 4.4 5.3	15.5 12.4 .2 1.8 .1	6.1 .0 .0 3.4 .0	.0 .0 .0 .0	1.3 .0 1.2 .0	.0 .0 .0 .0	3.0 .0 3.0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
Pension Benefit Guaranty CorpPension & Welfare Benefits Admin	.7 3.0	.3 .8	.4 2.2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of State <sup>4</sup>	1.0	.3	.6	.0	.0	-	.0	.0	.0	.0
Department of Transportation, total	929.8 22.7 233.7 559.7 23.9	286.2 13.5 73.1 137.4 13.0	337.3 8.9 135.2 164.3 8.7	5.8 .3 2.6 2.3 .0	44.7 .0 15.6 13.9 1.7	.1 .0 .0 .0	71.5 .0 .0 68.4 .4	7.2 .0 7.2 .0	176.3 .0 .0 173.4 .0	.7 .0 .0 .0
Federal Transit Administration Nat'l Highway Traffic Safety Admin Office of the Secretary Research & Special Programs Admin		2.5 37.6 4.5 4.8	3.6 14.1 .0 2.6	.6 .0 .0	7.7 5.9 .0	.0 .0 .0	2.0 .6 .0 .1	.0 .0 .0	2.9 .0 .0	.0 .6 .0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	73.7 .9	44.8 2.4 38.1 .9 3.0	41.4 .0 35.6 .0 5.2	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0	.0 .0 .0 .0
United States Mint United States Secret Service	.5 .6	.1 .4	.4 .2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Veterans Affairs	316.0	316.0	.0	.0	.0	.0	.0	.0	.0	.0

### Table C-10. Preliminary Federal obligations for total research and development, by agency and performer: fiscal year 2000

### [Dollars in millions]

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						Extra	mural				
		Intra-									
Agency and subdivision	Total	mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by nonprofit insti- tutions	State and local govts	Foreign	
Other agencies:											
Appalachian Regional Commission Consumer Product Safety Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	.8 1.3 534.9 2.7 1.4	.3 230.5 2.7 1.4	.2 1.1 87.3 .0 .0	.0 .0 .0 .0	.4 .0 139.3 .0	.0 .0 .0 .0	.2 .0 60.1 .0	.0 .0 .0 .0	.0 .0 14.7 .0	.0 .0 3.0 .0	
International Development Cooperation Agency, total Agcy for International Dvlpmt <sup>5</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	194.1 194.1 1.8 9,370.3	23.1 23.1 1.3 2,346.1 .1	9.0 9.0 .5 4,429.7 .0	.0 .0 .0 4.0	12.0 12.0 - 786.6 .0	.0 .0 .0 1,367.4	132.4 132.4 .0 369.7	.0 .0 .0 5.9 .0	.0 .0 .0 13.5	17.6 17.6 .0 47.5	
National Science Foundation  Nuclear Regulatory Commission Smithsonian Institution Social Security Administration United States Information Agency US International Trade Commission	2,698.3 46.6 129.0 36.9 .1 7.1	20.0 14.3 129.0 3.4 .1 7.1	114.0 2.3 .0 22.1 .0	.0 14.3 .0 .0 .0	2,214.1 3.6 .0 6.1 .0	165.0 8.2 .0 .0 .0	169.8 .3 .0 1.1 .0	.2 1.6 .0 .0 .0	4.3 .0 .0 4.2 .0	10.9 2.1 .0 .0 .0	

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** - = Amount less than 50 thousand dollars

FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-11. Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 1998

### [Dollars in thousands]

	R	esearch and	l developme	nt		R&D	plant	
Agency and subdivision	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts
Total, all agencies	5,681,992	1,188,850	3,890,155	602,987	721,349	45,581	663,620	12,148
Department of Commerce, total	27 27	0 0	27 27	0 0	0 0	0	0 0	0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	740,154 261,670 58,587 111,427 288,005	85,021 18,500 2,736 6,798 56,987	347,206 104,504 30,099 42,702 169,901	307,927 138,666 25,752 61,927 61,117	127 0 127 0 0	0 0 0 0	127 0 127 0 0	0 0 0 0
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction Agency 1	104,531 102,893 5,755 1,235 10,320	23,646 9,989 506 0 4,132	58,313 68,658 312 100 5,361	22,572 24,246 4,937 1,135 827	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Special Operations Command	1,543 61,728	1,543 17,171	0 37,157	0 7,400	0 0	0	0 0	0 0
Director Test & Evaluation, Deputy Under Secretary of Defense	14,805 5.660	0	0	14,805 5,660	0	0	0	0
Department of Energy	.,	918,225		260,471	684,667	44,081	628,438	12,148
Dept of Health & Human Svcs, total	213,916 213,916	163,223 163,223	30,182 30,182	20,511 20,511	1,500 1,500	1,500 1,500	0	0 0
Department of State <sup>2</sup>	15	0	15	0	0	0	0	0
Department of Transportation, total	13,995 500 8,389 4,979 127	4,337 500 2,228 1,609 0	3,427 0 0 3,370 57	6,231 0 6,161 0 70	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Other agencies:								
National Aeronautics & Space Admin National Science Foundation Nuclear Regulatory Commission	1,133,437 139,290 26,290	3,980 0 14,064	1,123,543 139,079 10,504	5,914 211 1,722	12,000 23,055 0	0 0 0	12,000 23,055 0	0 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

# Table C-12. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 1999

### [Dollars in thousands]

	R	esearch and	l developme	nt	R&D plant					
Agency and subdivision	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts		
Total, all agencies	6,058,902	1,294,582	4,107,968	656,352	837,578	172,300	650,647	14,631		
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	111 29 82	0 0 0	111 29 82	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	732,299 219,894 90,807 105,134 290,496	109,598 18,391 10,691 6,651 73,865	294,508 72,456 37,825 30,187 154,040	328,193 129,047 42,291 68,296 62,591	180 0 180 0 0	0 0 0 0	180 0 180 0	0 0 0 0		
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction Agency <sup>1</sup>	108,138 100,866 6,429 1,705 11,053	44,254 9,903 0 115 3,870	48,703 68,533 318 0 5,828	15,181 22,430 6,111 1,590 1,355	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		
Special Operations Command	1,250 61,055	1,250 14,473	0 30,658	0 15,924	0 0	0 0	0	0		
Director Test & Evaluation, Deputy Under Secretary of Defense	17,835 8,133	0	0	17,835 8,133	0	0	0	0		
Department of Energy	3,734,291	970,841	2,472,953	290,497	797,046	170,800	611,615	14,631		
Dept of Health & Human Svcs, total	248,768 248,768	189,816 189,816	35,099 35,099	23,853 23,853	1,500 1,500	1,500 1,500	0	0		
Department of State <sup>2</sup>	15	0	15	0	0	0	0	0		
Department of Transportation, total	11,753 400 8,473 2,640 240	4,900 400 2,250 2,250 0	630 0 0 390 240	6,223 0 6,223 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		
Other agencies:										
National Aeronautics & Space Admin National Science Foundation Nuclear Regulatory Commission	1,153,676 153,357 24,632	3,980 0 15,447	1,143,782 153,126 7,744	5,914 231 1,441	13,700 25,152 0	0 0 0	13,700 25,152 0	0 0 0		

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

# Table C-13. Preliminary Federal obligations for research and development and for R&D plant to federally funded research and development centers, by agency: fiscal year 2000

### [Dollars in thousands]

	R	esearch and	developme	nt		R&D	plant	
Agency and subdivision	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts	Total	Admin by indus- trial firms	Admin by univs & colleges	Admin by other nonprofit insts
Total, all agencies	6,478,165	1,336,966	4,470,653	670,546	929,011	248,852	668,184	11,975
Department of Commerce, total	29 29	0 0	29 29	0 0	0 0	0 0	0	0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	670,032 136,647 62,147 108,249 336,130	100,632 22,117 8,463 6,361 63,691	231,119 8,227 30,271 30,823 161,798	338,281 106,303 23,413 71,065 110,641	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction Agency <sup>1</sup>	78,738 106,096 5,835 300 12,547	33,557 10,384 0 200 4,349	35,079 72,577 325 0 6,622	10,102 23,135 5,510 100 1,576	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Special Operations Command	1,163 131,451	1,163 14,038	0 47,195	0 70,218	0 0	0 0	0	0
Director	17,900 8,959	0	0	17,900 8,959	0	0	0	0
Department of Energy	3,973,798	1,018,016	2,662,866	292,916	893,797	247,352	634,470	11,975
Dept of Health & Human Svcs, total	254,654 254,654	194,307 194,307	35,930 35,930	24,417 24,417	1,500 1,500	1,500 1,500	0	0
Department of State <sup>2</sup>	15	0	15	0	0	0	0	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Transit Administration Research & Special Programs Admin	12,998 300 9,744 2,280 600 74	5,768 300 2,588 2,280 600 0	74 0 0 0 0 0 74	7,156 0 7,156 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Other agencies:								
National Aeronautics & Space Admin	1,377,337 165,264 24,038	3,980 0 14,263	1,367,443 165,016 8,161	5,914 248 1,614	9,800 23,914 0	0 0 0	9,800 23,914 0	0 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

<sup>&</sup>lt;sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

# Table C-14. Federal obligations for research and development to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aero- nautics & Space Admin	National Science Founda- tion	Other
Total, all FFRDCs	5,681,992	27	740,154	3,414,868	213,916	1,133,437	139,290	40,300
FFRDCs administered by industrial firms Idaho National Engineering Lab NCI Frederick Cancer Rsch & Dvlpmt Ctr Oak Ridge National Laboratory Sandia National Laboratories Savannah River Technology Center	1,188,850 59,825 163,223 313,532 634,029 18,241	0 0 0	85,021 2,442 0 15,868 66,661 50	918,225 53,167 0 286,521 560,346 18,191	163,223 0 163,223 0	3,980 100 0 3,628 252	0 0 0 0 0 0	18,401 4,116 0 7,515 6,770
FFRDCs administered by universities & colleges <sup>1</sup>	3,890,155	27	347,206	2,236,172	30,182	1,123,543	139,079	13,946
Ames Laboratory Argonne National Laboratory Brookhaven National Laboratory Ernest Orlando Lawrence Berkeley	20,824 225,021 216,647	0 27	1,205 8,601 1,100	19,619 210,692 207,628	0 0 1,749	0 270 1,953	0 0 842	5,458 3,348
National Laboratory	236,981	0	17,849	199,991	16,588	2,382	171	0
Fermi National Accelerator Lab Jet Propulsion Laboratory Lawrence Livermore National Lab Lincoln Laboratory Los Alamos National Laboratory	179,376 1,134,804 648,135 152,146 605,519	0 0	18,998 34,816 151,890 19,666	605,393 0	0 0 5,442 0 6,122	0 1,115,763 2,148 256 390	0 43 0 0 101	0 0 336 0 4,804
National Astronomy & Ionosphere Ctr	8,058 63,328		0 16	0 0	0	0 381	8,058 62,931	0
Observatories <sup>2</sup> National Radio Astronomy Observatory Oak Ridge Institute for Science & Ed	36,485 30,448 10,256	0	0 0 0	0 0 9,975	0 0 281	0 0 0	36,485 30,448 0	0 0 0
Princeton Plasma Physics Laboratory	113,451 16,886 130,045	0	76,179 16,886 0	37,272 0 130,045	0 0 0	0 0 0	0 0 0	0 0 0
Facility <sup>3</sup>	61,745	0	0	61,745	0	0	0	0

# Table C-14. Federal obligations for research and development to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1998

### [Dollars in thousands]

Page 2 of 2

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aero- nautics & Space Admin	National Science Founda- tion	Other
FFRDCs administered by nonprofit								
institutions <sup>4</sup>	602,987	0	307,927	260,471	20,511	5,914	211	7,953
& Development CenterArroyo Center <sup>5</sup>	89,270 4,663	0 0	86,265 4,663	0 0	0 0	2,892 0	113 0	0
C3I Federally Funded Research &  Development Center <sup>6</sup> Center for Advanced Aviation System	129,893	0	129,347	0	546	0	0	0
Development 6	12,719	0	7,825	0	0	0	0	4,894
Center for Naval Analyses Center for Nuclear Waste Regulatory	40,357	0	40,346	0	0	0	11	0
Analyses <sup>7</sup> Critical Technologies Institute <sup>5</sup> Institute for Defense Analyses Studies	700 70	0 0	700 0	0 0	0 0	0 0	0 0	0 70
& Analyses FFRDC  Logistics Management Institute <sup>8</sup>	31,170 3,800	0	31,083 828	0 0	0	0 2,972	87 0	0
National Defense Research Institute <sup>5</sup> National Renewable Energy Laboratory <sup>9</sup>	16,452 123,027		1,713 30	0 122,997	14,689 0	50 0	0	0
Pacific Northwest National Laboratory	150,455		4,716	137,474	5,276	Ō	Ō	2,989

Includes university consortia.

- <sup>2</sup> Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory and the National Solar Observatory (formerly Sacramento Peak Observatory).
- 3 In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.
- <sup>4</sup> That is, other than universities and colleges.
- The following portions of the RAND Corp. are FFRDCs: National Defense Research Institute (formerly Defense/Office of the Joint Chiefs of Staff), Project Air Force, the Arroyo Center, and the Critical Technologies Institute. All other agency support to RAND is reported under "other nonprofit institutions excluding FFRDCs."
- Only the C3I Federally Funded Research & Development Center and the Center for Advanced Aviation System Development parts of the MITRE Corp. are FFRDCs. All other agency support to MITRE is reported under "other nonprofit institutions excluding FFRDCs."
- Beginning in fiscal year 1996, the Nuclear Regulatory Commission classified its funds to the Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute) as technical support, not research and development.
- 8 Logistics Management Institute moved from Bethesda, MD, to McLean, VA, in May 1994.
- In September 1991 the name was changed from Solar Energy Research Institute.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX as an FFRDC in November 1993.

The Department of Energy decertified Bettis Atomic Power Laboratory, Hanford Engineering Development Laboratory, and Knolls Atomic Power Laboratory as FFRDCs in October/November 1992. The Department of Energy removed from the Master Government List of FFRDCs: the Energy Technology Engineering Center in November 1995, and the Inhalation Toxicology Research Institute in May 1996.

Critical Technologies Institute (CTI), as established in 1992, supports sciences and technology policy. The National Science Foundation has determined that CTI's activities are classified as non-investment and do not fit within the definitions of basic or applied research or development.

# Table C-15. Federal obligations for R&D plant to federally funded research and development centers (FFRDCs), by individual FFRDC and agency: fiscal year 1998

### [Dollars in thousands]

Federally funded research and development centers	Total	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	National Aero- nautics & Space Admin	National Science Founda- tion	Other
Total, all FFRDCs	721,349	0	127	684,667	1,500	12,000	23,055	0
FFRDCs administered by industrial firms	45,581 366 1,500 26,414 17,301	0 0 0 0	0 0 0 0	44,081 366 0 26,414 17,301	1,500 0 1,500 0	0 0 0 0	0 0 0 0	0 0 0 0
FFRDCs administered by universities & colleges1	663,620 3,877 33,965 97,839 37,815	0 0 0 0	127 0 127 0	628,438 3,877 33,838 97,839 37,815	0 0 0 0	12,000 0 0 0	23,055 0 0 0	0 0 0 0
Fermi National Accelerator Lab Jet Propulsion Laboratory Lawrence Livermore National Lab Los Alamos National Laboratory National Center for Atmospheric Rsch	97,517 12,000 218,673 75,194 9,641	0 0 0 0	00000	97,517 0 218,673 75,194	0 0 0 0	0 12,000 0 0	0 0 0 0 9,641	0 0 0 0
National Optical Astronomy Observatories <sup>2</sup> National Radio Astronomy Observatory Oak Ridge Institute for Science & Ed Princeton Plasma Physics Laboratory Stanford Linear Accelerator Center Thomas Jefferson National Accelerator Facility <sup>3</sup>	4,000 9,414 1,284 13,293 41,613	0 0 0 0 0	0 0 0 0	0 0 1,284 13,293 41,613	0 0 0 0	0 0 0 0	4,000 9,414 0 0 0	0 0 0 0 0
FFRDCs administered by nonprofit institutions <sup>4</sup> National Renewable Energy Laboratory <sup>5</sup> Pacific Northwest National Laboratory	12,148 2,738 9,410	0 0	0 0 0	12,148 2,738 9,410	0 0	0 0 0	0 0	0 0 0

<sup>&</sup>lt;sup>1</sup> Includes university consortia.

### NOTES:

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

The Department of the Army decertified the Institute for Advanced Technology (University of Texas), Austin, TX as an FFRDC in November 1993.

The Department of Energy decertified Bettis Atomic Power Laboratory, Hanford Engineering Development Laboratory, and Knolls Atomic Power Laboratory as FFRDCs in October/November 1992. The Department of Energy removed from the Master Government List of FFRDCs: the Energy Technology Engineering Center in November 1995, and the Inhalation Toxicology Research Institute in May 1996.

Critical Technologies Institute (CTI), as established in 1992, supports sciences and technology policy. The National Science Foundation has determined that CTI's activities are classified as non-investment and do not fit within the definitions of basic or applied research or development.

Since February 1984 this center has included three former FFRDCs: Cerro Tololo Inter-American Observatory, Kitt Peak National Observatory and the National Solar Observatory (formerly Sacramento Peak Observatory).

In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.

<sup>&</sup>lt;sup>4</sup> That is, other than universities and colleges.

<sup>&</sup>lt;sup>5</sup> In September 1991 the name was changed from Solar Energy Research Institute.

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

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						Extramur	al		Γαί	ge 1 of 3
					United Sta	tes and terri	itories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	30,922,269	7,964,727	4,635,074	844,134	11,741,033	2,742,980	2,425,249	214,489	240,080	114,503
Departments:										
Department of Agriculture, total	1,333,905 4,018 689,730	897,124 3,714 649,727	10,858 0 0	0 0 0	408,122 274 34,704	0 0 0	12,206 0 2,438	0 0 0	1,827 30 9	3,768 0 2,852
Education, & Extension Service Economic Research Service	386,445 71,547	19,923 63,077	8,920 1,900	0 0	349,997 4,961	0 0	6,383 467	0 0	1,222 311	0 831
Food Safety Inspection Service	125 1,422 172,300	125 971 154,710	0 0 38	0 0 0	0 451 15,610	0 0 0	0 0 1,602	0 0 0	0 0 255	0 0 85
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	549 3,333 4,436	549 3,112 1,216	0 0 0	0 0 0	0 205 1,920	0 0 0	0 16 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	806,993 5,166 557 305,376 492,128	625,411 5,166 50 209,924 406,505	79,211 0 19 75,266 3,926	0 0 0 0	99,042 0 288 19,356 79,398	22 0 0 22 0	2,787 0 200 611 1,976	0 0 0 0	323 0 0 0 323	197 0 0 197 0
Information Administration	3,766	3,766	0	0	0	0	0	0	0	0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	3,969,891 736,879 817,841 822,158 1,593,013	1,407,916 394,410 454,988 323,021 235,497	1,371,604 236,047 224,863 231,196 679,498	12,053 275 274 2,258 9,246	964,689 85,722 108,916 225,873 544,178	84,369 521 655 8,319 74,874	86,489 14,467 20,562 22,169 29,291	17,464 2,715 3,793 1,968 8,988	0 0 0 0	25,307 2,722 3,790 7,354 11,441
Ballistic Missile Defense Org	126,801 856,268 1,094 8,016	24,783 68,221 1,094 7,171	83,050 434,870 0 0	100 5,121 0 0	7,081 261,874 0 0	9,536 43,494 0 0	541 28,332 0 0	7,818 0 845	0 0 0 0	1,710 6,538 0 0
Agency <sup>2</sup>	205,073	61,136	130,687	3,940	2,414	3,985	0	125	0	2,786
Special Operations Command	15,696 380,065	4,755 68,337	9,578 21,313	0 85	1,363 271,446	0 17,859	0 418	0 200	0 0	0 407
Department of Education	148,742	6,997	5,158	0	103,202	0	32,383	0	1,002	0
Department of Energy	3,787,511	183,005	202,914	669,206	563,536	1,934,102	65,786	164,943	2,955	1,064

Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

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									Pa	ge 2 of 3
						Extramur	al			
					United Sta	tes and terri	tories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	12,018,474 2,435 23,456 138,798	2,437,547 185 948 28,467	655,528 0 2,080 52,297	143,310 0 0 0	6,854,037 0 9,874 37,020	27,722 0 0 0	1,729,181 250 8,621 20,770	19,124 0 0 0	114,666 2,000 1,895 0	37,359 0 38 244
Prevention	343,559	239,825	33,336	0	61,368	0	3,260	0	5,770	0
Food & Drug Administration	142,937 51,236 12,925 11,289,180 13,948	118,796 353 2,960 2,041,475 4,538	4,089 38,190 0 524,275 1,261	0 0 0 143,310 0	14,155 5,329 7,529 6,715,863 2,899	0 0 0 27,722 0	5,492 6,006 2,436 1,680,106 2,240	0 0 0 19,124 0	70 1,089 0 100,832 3,010	335 269 0 36,473
Office of the Asst Secretary, Planning & Evaluation	13,948	4,538	1,261	0	2,899	0	2,240	0	3,010	0
Dept of Housing & Urban Development	9,211	6,263	913	0	478	0	1,557	0	0	0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	502,852 6,626 437,198 29,286 29,742	436,263 5,557 407,461 6,614 16,631	11,136 0 1,930 7,505 1,701	0 0 0 0	46,365 656 20,997 13,578 11,134	0 0 0 0	731 173 0 282 276	0 0 0 0	7,292 240 6,810 242 0	1,065 0 0 1,065 0
Department of Justice, total  Bureau of Prisons  Office of Justice Programs	42,005 4,326 37,679	3,366 2,500 866	10,920 0 10,920	0 0 0	18,201 0 18,201	0 0 0	7,312 0 7,312	0 0 0	2,206 1,826 380	0 0 0
Department of Labor, total	22,079 12,400 2,197 4,592 95	10,689 8,400 47 1,697 30	4,108 0 0 2,895 0	0 0 0 0	6,208 4,000 2,100 0 65	0 0 0 0	1,074 0 50 0	0 0 0 0	0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 2,740	55 460	0 1,213	0	0 43	0 0	0 1,024	0 0	0 0	0 0
Department of State <sup>3</sup>	852	324	513	0	0	15	0	0	0	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	401,046 5,110 151,550 169,605 21,191	104,542 3,285 31,506 30,417 9,360	164,759 1,325 107,989 33,975 9,945	4,147 500 2,228 1,419 0	25,801 0 3,666 11,633 350	3,427 0 0 3,370 0	10,125 0 0 7,339 1,404	6,231 0 6,161 0	81,452 0 0 81,452 0	562 0 0 0 132
Federal Transit Administration	7,400	400	0	0	6,000	0	1,000	0	0	0
Administration	41,621 4,569	26,637 2,937	10,199 1,326	0	4,048 104	0 57	307 75	0 70	0 0	430 0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	52,553 2,676 47,942 684 776 475	38,746 2,676 35,053 684 50 283	13,807 0 12,889 0 726 192	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0
Department of Veterans Affairs	269,066	269,066	0	0	0	0	0	0	0	0

### Table C-16. Federal obligations for research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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										ge 3 01 3
						Extramu	al			
					United Sta	ites and terri	tories			
Agency and subdivision	Total Intra- mural		Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	680 477,200 3,025 1,144 172,923	15 246,929 3,025 1,144 19,040	200 66,512 0 0 10,266	0 0 0 0	400 106,099 0 0 11,996	0 0 0 0	65 44,748 0 0 110,870	0 0 0 0	0 11,204 0 0	0 1,708 0 0 20,751
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	172,923 455 4,413,651 120 2,289,337	19,040 455 1,104,392 120 16,954	10,266 0 1,918,670 0 101,421	0 0 1,354 0 0	11,996 0 647,500 0 1,874,860	0 0 543,740 0 139,079	110,870 0 174,016 0 144,022	0 0 4,794 0 211	0 0 7,747 0 3,596	20,751 0 11,438 0 9,194
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy³ United States Information Agency US International Trade Commission	51,700 120,000 17,422 809 1,200 258 7,165	14,301 120,000 2,336 809 525 258 7,165	3,486 0 2,415 0 675	14,064 0 0 0 0 0	5,180 0 5,317 0 0	10,504 0 0 0 0	353 0 1,544 0 0	1,722 0 0 0 0 0	5,810 0 0 0 0	2,090 0 0 0 0 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

Page 1 of 3

									Pa	ge 1 of 3
						Extramur	ral			
					United Sta	tes and terri	itories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	33,821,686	8,440,098	4,906,953	896,428	13,191,687	2,962,339	2,729,830	245,534	329,832	118,985
Departments:										
Department of Agriculture, total	4,000	956,872 4,000 711,060	14,111 0 0	0 0 0	529,192 0 41,434	0 0 0	11,745 0 2,438	0 0 0	1,426 0 9	3,086 0 3,001
Education, & Extension Service Economic Research Service	506,189 64,966	22,971 55,897	14,073 0	0 0	461,648 9,069	0 0	6,335 0	0 0	1,162 0	0 0
Food Safety Inspection Service	1,422	125 971 156,910	0 0 38	0 0 0	0 451 15,610	0 0 0	0 0 1,602	0 0 0	0 0 255	0 0 85
Stockyards Administration	3,221	549 2,971 1,418	0 0 0	0 0 0	0 180 800	0 0 0	0 70 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	9,854 550 330,365 537,307	680,447 9,854 50 218,446 448,214	104,276 0 300 99,908 4,068	0 0 0 0 0	94,443 0 0 11,181 83,262	104 0 0 22 82	2,226 0 200 611 1,415	0 0 0 0	266 0 0 0 266	197 0 0 197 0
Information Administration	.,	3,883	0	0	0	0	0	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	752,586 878,206	1,427,588 379,657 457,803 355,057 235,071	1,437,009 237,663 239,067 256,477 703,802	18,065 2,092 4,296 2,303 9,374	1,025,537 101,437 135,682 243,414 545,004	75,240 874 372 4,868 69,126	104,412 25,071 22,974 23,675 32,692	29,529 2,372 15,126 1,757 10,274	1,982 0 1,982 0	22,568 3,420 904 8,019 10,225
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction	936,546 2,389 8,151	21,559 74,563 2,389 6,761	87,756 477,429 0 0	5,793 0 0	4,304 284,136 0 0	1,451 47,286 0 0	100 31,446 0 0	0 8,559 0 1,390	0 0 0 0	7,334 0 0
Agency <sup>2</sup>	183,996	54,831	117,264	3,501	2,208	3,491	0	125	0	2,576
Special Operations Command		5,653 69,315	12,107 9,246	0 80	897 253,459	0 16,898	0 1,146	0 200	0 0	0 315
Department of Education	153,917	7,864	6,053	0	105,814	0	33,104	0	1,082	0
Department of Energy	4,130,134	229,667	273,779	690,203	565,628	2,117,873	67,625	180,985	3,250	1,124

Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

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Dept of Health & Human Svcs, total   13,697,084   2,631,288   736,684   166,659   7,936,304   32,238   1,999,949   22,   Admin for Children & Families   18,789   1,219   1,775   0   9,549   0   5,379   Agcy for HIth Care Policy & Rsch   160,923   60,800   46,940   0   33,957   0   18,976   Centers for Disease Control & Prevention   382,559   272,825   39,336   0   61,368   0   3,260     Food & Drug Administration   141,229   117,459   4,000   0   7,000   0   8,210   Health Care Financing Admin   50,000   60   32,940   0   7,755   0   2,509   0   12,915,467   2,172,047   609,693   166,659   7,799,075   32,238   1,993,840   22,   3,000   0   3,000   0   2,000   0   0   0   0   0   0   0   0   0	FRDCs ddmin y non-orofit and local govts state and local govts sta	43,295 0 40 250 0 300 290 0 42,415 0
Dept of Health & Human Svcs, total   13,697,084   2,631,288   736,684   166,659   7,936,304   32,238   1,999,949   22,   Admin for Children & Families   1,160   18,789   1,219   1,775   0   9,549   0   5,379   33,957   0   18,976     Centers for Disease Control & Prevention   382,559   272,825   39,336   0   61,368   0   3,260     Food & Drug Administration   141,229   117,459   4,000   0   14,000   0   8,210   Health Care Financing Admin   12,915,467   2,172,047   0,600   0   3,000   0   2,000   Dept of Housing & Urban Development   21,313   11,493   3,038   0   1,596   0   5,186   Department of the Interior, total   533,974   465,731   11,149   0   47,609   0   678   Department of the Interior, total   13,697,084   Intramural Industrial administration   Industrial firms   Industrial administration   Universities admin by industrial admin by industrial admin by industrial firms   Universities admin by industrial administration   13,697,084   2,631,288   736,684   166,659   7,936,304   32,238   1,999,949   22,   22,   22,   23,000   2,0	Marin   State   And   Incorporation   And	43,295 0 40 250 0 300 290 0 42,415
Dept of Health & Human Svcs, total   13,697,084   2,631,288   736,684   166,659   7,936,304   32,238   1,999,949   22, Administration on Aging   1,160   185   0   0   0   0   0   0   375   Admin for Children & Families   18,789   1,219   1,775   0   9,549   0   5,379   Agcy for Hith Care Policy & Rsch   160,923   60,800   46,940   0   33,957   0   18,976   Centers for Disease Control & Prevention   382,559   272,825   39,336   0   61,368   0   3,260   Food & Drug Administration   141,229   117,459   4,000   0   14,000   0   5,400   Health Care Financing Admin   50,000   60   32,940   0   7,700   0   8,210   2,509   National Institutes of Health   12,915,467   2,172,047   609,693   166,659   7,799,075   32,238   1,953,840   22, 000   Office of the Secretary, Planning & Evaluation   14,000   4,000   2,000   0   3,000   0   2,000   Dept of Housing & Urban Development   21,313   11,493   3,038   0   1,596   0   5,186   Department of the Interior, total   533,974   465,731   11,149   0   47,609   0   678	Marin   State   And   Incorporation   And	43,295 0 40 250 0 300 290 0 42,415
Administration on Aging Admin for Children & Families         1,160         185         0         0         600         0         375           Adgrif for Children & Families         18,789         1,219         1,775         0         9,549         0         5,379           Agcy for Hth Care Policy & Rsch         160,923         60,800         46,940         0         33,957         0         18,976           Centers for Disease Control & Prevention         382,559         272,825         39,336         0         61,368         0         3,260           Food & Drug Administration         141,229         117,459         4,000         0         14,000         0         5,400           Health Care Financing Admin         50,000         60         32,940         0         7,000         0         8,210           Health Resources & Services Admin         12,957         2,693         0         7,799,075         32,238         1,953,840         22,           Office of the Secretary, Office of the Secretary, Planning & Evaluation         14,000         4,000         2,000         0         3,000         0         2,000           Dept of Housing & Urban Development         21,313         11,493         3,038         0         1,596         0	0 827 0 5,770 0 70 0 1,500 0 0 117,200 0 3,000 0 3,000	0 40 250 0 300 290 0 42,415
Prevention         382,559         272,825         39,336         0         61,368         0         3,260           Food & Drug Administration         141,229         117,459         4,000         0         14,000         0         5,400           Health Care Financing Admin         50,000         60         32,940         0         7,000         0         8,210           Health Resources & Services Admin         12,957         2,693         0         0         7,755         0         2,509           National Institutes of Health         12,915,467         2,172,047         609,693         166,659         7,799,075         32,238         1,953,840         22,000           Office of the Secretary, total         14,000         4,000         2,000         0         3,000         0         2,000           Dept of Housing & Urban Development         21,313         11,493         3,038         0         1,596         0         5,186           Department of the Interior, total         533,974         465,731         11,149         0         47,609         0         678	0 70 0 1,500 0 0 22,240 117,260 0 3,000 0 3,000	300 290 0 42,415
Health Care Financing Admin       50,000       60       32,940       0       7,000       0       8,210         Health Resources & Services Admin       12,957       2,693       0       0       7,755       0       2,509         National Institutes of Health       12,915,467       2,172,047       609,693       166,659       7,799,075       32,238       1,953,840       22,         Office of the Secretary, total       14,000       4,000       2,000       0       3,000       0       2,000         Dept of Housing & Urban Development       21,313       11,493       3,038       0       1,596       0       5,186         Department of the Interior, total       533,974       465,731       11,149       0       47,609       0       678	0 1,500 0 0 22,240 117,260 0 3,000 0 3,000	290 0 42,415 0
Planning & Evaluation     14,000     4,000     2,000     0     3,000     0     2,000       Dept of Housing & Urban Development     21,313     11,493     3,038     0     1,596     0     5,186       Department of the Interior, total     533,974     465,731     11,149     0     47,609     0     678		0
Department of the Interior, total		
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	0
Bureau of Reclamation     6,050     5,017     0     0     783     0     150       Geological Survey     469,124     436,874     1,930     0     23,510     0     0       Minerals Management Service     29,056     7,211     7,518     0     12,180     0     250       National Park Service     29,744     16,629     1,701     0     11,136     0     278	0 7,132 0 100 0 6,810 0 222 0 0	1,675 0 0 1,675 0
Department of Justice, total       49,518       4,125       13,544       0       18,210       0       11,514         Bureau of Prisons       3,950       2,500       0       0       0       0       0         Office of Justice Programs       45,568       1,625       13,544       0       18,210       0       11,514	0 2,125 0 1,450 0 675	0 0 0
Department of Labor, total	0 0 0 0 0 0 0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp         57         57         0 <t< td=""><td>0 0</td><td>0 0</td></t<>	0 0	0 0
Department of State <sup>3</sup>	0 0	0
Coast Guard 4,491 3,000 1,091 400 0 0 0	6,223 155,357 0 0 6,223 0 155,357 0 0	708 0 0 0 208
Federal Transit Administration         4,100         600         300         0         1,200         0         2,000	0 0	0
National Highway Traffic Safety         50,350         32,224         12,084         0         5,035         0         507           Research & Special Programs Admin         5,866         3,558         2,018         0         0         240         50	0 0	500 0
Department of the Treasury, total       60,703       39,285       21,418       0       0       0       0         Bureau of Engraving & Printing       2,236       2,236       0       0       0       0       0         Internal Revenue Service       55,496       35,845       19,651       0       0       0       0         Office of Thrift Supervision       766       766       0       0       0       0       0         United States Customs Service       1,679       75       1,604       0       0       0       0         United States Secret Service       526       363       163       0       0       0       0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0
Department of Veterans Affairs	0 0	0

### Table C-17. Preliminary Federal obligations for research, by agency and performer: fiscal year 1999

### [Dollars in thousands]

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									. ";	90 0 01 0			
					Extramural								
			United States and territories										
Agency and subdivision	Total	otal Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign			
Other agencies:													
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	738 462,863 4,178 1,097	1 233,656 4,178 1,097	225 65,955 0 0	0 0 0 0	400 105,211 0 0	0 0 0 0	112 44,373 0 0 104,470	0 0	11,110				
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	163,220 595 4,433,117 120 2,512,892	17,954 595 1,109,318 120 18,625	9,790 0 1,900,275 0 108,964	0 0 1,426 0 0	11,421 0 647,500 0 2,059,772	0 0 575,369 0 153,126	104,470 0 174,792 0 158,092	0 4,885 0	0 0 7,749 0 3,958	19,585 0 11,803 0 10,124			
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration US Arms Control & Disarmament Agcy <sup>3</sup> United States Information Agency US International Trade Commission	49,201 122,000 53,656 50 100 6,873	14,467 122,000 4,855 50 100 6,873	3,213 0 32,563 0 0	15,447 0 0 0 0 0	4,272 0 8,708 0 0	7,744 0 0 0 0 0	355 0 1,562 0 0	0		2,262 0 0 0 0 0			

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 2000

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			Page Extramural									
					United Sta	tes and terri	itories					
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign		
Total, all agencies	34,679,582	8,775,726	4,709,641	947,663	13,421,819	3,372,770	2,761,623	222,791	345,536	122,013		
Departments:												
Department of Agriculture, total	1,474,218 4,268 778,840	983,107 4,268 740,302	11,287 0 0	0 0 0	468,349 0 34,393	0 0 0	6,967 0 889	0 0 0	1,176 0 9	3,332 0 3,247		
Education, & Extension Service Economic Research Service	451,032 55,628	24,790 50,588	11,249 0	0 0	411,675 5,040	0 0	2,406 0	0	912 0	0 0		
Food Safety Inspection Service	125 1,422 174,500	125 971 156,910	0 0 38	0 0 0	0 451 15,610	0 0 0	0 0 1,602	0 0 0	0 0 255	0 0 85		
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	682 3,221 4,500	682 2,971 1,500	0 0 0	0 0 0	0 180 1,000	0 0 0	0 70 2,000	0 0 0	0 0 0	0 0 0		
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	859,738 4,991 550 339,607 508,396	666,734 4,991 50 221,331 434,168	109,955 0 300 105,708 3,947	0 0 0 0	80,840 0 0 11,461 69,379	22 0 0 22 0	1,704 0 200 888 616	0 0 0 0	286 0 0 0 286	197 0 0 197 0		
Information Administration	6,194	6,194	0	0	0	0	0	0	0	0		
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	4,116,260 723,365 771,815 902,250 1,718,830	1,439,063 373,670 462,238 359,905 243,250	1,424,494 237,672 205,738 246,971 734,113	17,806 300 4,692 2,536 10,278	1,032,019 106,097 83,693 254,342 587,887	92,164 590 292 3,662 87,620	74,385 1,171 13,402 24,870 34,942	12,042 861 255 1,504 9,422	0 0 0 0	24,287 3,004 1,505 8,460 11,318		
Ballistic Missile Defense Org	74,831 1,017,381 1,966 8,261	11,013 81,001 1,966 8,261	58,817 518,556 0 0	0 6,284 0 0	3,810 308,766 0 0	1,191 51,380 0 0	0 34,139 0 0	9,297 0 0	0 0 0	7,958 0 0		
Agency <sup>2</sup>	204,689	61,083	130,587	3,914	2,456	3,864	0	125	0	2,660		
Special Operations Command Washington Headquarters Svcs	17,269 394,433	5,232 74,694	11,203 14,950	0 80	834 272,021	0 31,185	0 803	0 0	0 0	0 700		
Department of Education	172,896	13,015	5,987	0	115,320	0	37,480	0	1,094	0		
Department of Energy	4,373,242	311,024	229,683	738,589	575,023	2,299,326	42,748	173,831	2,500	518		

Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 2000

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									Pa	ge 2 of 3
						Extramur	al			
					United Sta	ites and terri	tories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hith Care Policy & Rsch Centers for Disease Control &	14,100,245 1,085 28,049 197,255	2,816,346 185 1,074 85,849	762,728 0 2,728 52,243	170,602 0 0 0	8,081,497 500 14,671 37,793	33,002 0 0	2,037,468 400 8,264 21,120	0	131,825 0 1,270 0	44,011 0 42 250
Prevention	468,559	357,052	41,109	0	61,368	0	3,260	0	5,770	0
Food & Drug Administration	151,745 55,000 13,081 13,171,471 14,000	126,245 70 2,817 2,239,054 4,000	4,300 36,230 0 624,118 2,000	0 0 0 170,602 0	15,000 7,700 7,755 7,933,710 3,000	0 0 0 33,002 0	5,800 9,350 2,509 1,984,765 2,000		100 1,650 0 120,035 3,000	300 0 0 43,419 0
Office of the Asst Secretary, Planning & Evaluation	14,000	4,000	2,000	0	3,000	0	2,000	0	3,000	0
Dept of Housing & Urban Development	18,054	12,277	1,787	0	939	0	3,051	0	0	0
Department of the Interior, total	552,058 7,436 484,227 28,565 31,830	483,768 6,365 451,891 7,329 18,183	11,587 0 2,016 7,618 1,953	0 0 0 0	47,670 821 23,510 11,923 11,416	0 0 0 0	678 150 0 250 278	0	7,130 100 6,810 220	1,225 0 0 1,225 0
Department of Justice, total	25,041 4,000 21,041	2,502 2,500 2	6,167 0 6,167	0 0 0	7,285 0 7,285	0 0 0	6,471 0 6,471	0 0 0	2,616 1,500 1,116	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hith Admin Office of the Secretary	22,141 12,400 1,331 5,255 100	15,128 12,400 51 1,817 30	5,663 0 0 3,438 0	0 0 0 0	1,270 0 1,200 0 70	0 0 0 0	80 0 80 0	0	0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 3,000	55 775	0 2,225	0	0 0	0	0	0	0 0	0 0
Department of State <sup>3</sup>	964	327	622	0	0	15	0	0	0	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	675,559 5,667 173,000 406,024 23,601	167,557 3,237 46,219 64,351 12,815	225,019 2,130 109,573 88,817 8,537	4,920 300 2,588 2,032 0	27,677 0 7,464 11,480 1,662	74 0 0 0 0	70,769 0 0 67,694 400	7,156 0	171,650 0 0 171,650 0	737 0 0 0 187
Federal Transit Administration National Highway Traffic Safety	4,100	500	400	0	1,200	0	2,000	0	0	0
Administration	58,713 4,454	37,576 2,859	14,091 1,471	0 0	5,871 0	0 74	625 50	0	0 0	550 0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	74,845 2,314 70,217 855 900 559	39,857 2,314 36,199 855 100 389	34,988 0 34,018 0 800 170	00000	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0	0 0 0 0 0	0 0 0 0
Department of Veterans Affairs	307,000	307,000	0	0	0	0	0	0	0	0
	L	l				l		1	l	

### Table C-18. Preliminary Federal obligations for research, by agency and performer: fiscal year 2000

### [Dollars in thousands]

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										90000
						Extramur	ral			
					United Sta	tes and terri	itories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission	750 1,168 446,900 2,747 1,379	1 168 222,910 2,747 1,379	200 1,000 64,095 0	0 0 0 0	399 0 102,244 0 0	0 0 0 0	150 0 44,495 0 0	0 0 0 0	0 0 10,797 0 0	0 0 2,359 0 0
Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	143,573 143,573 614 4,392,011 120	17,086 17,086 614 1,099,061 120	8,521 8,521 0 1,667,525	0 0 0 1,483 0	9,950 9,950 0 647,500	0 0 0 774,990 0	90,971 90,971 0 173,003	0 0 0 5,134 0	0 0 0 8,003	17,045 17,045 0 15,312
National Science Foundation  Nuclear Regulatory Commission  Smithsonian Institution  Social Security Administration  United States Information Agency  US International Trade Commission	2,698,326 46,594 129,000 36,895 100 7,144	20,026 14,251 129,000 3,414 100 7,144	114,010 2,260 0 22,063 0	0 14,263 0 0 0	2,214,089 3,625 0 6,123 0	165,016 8,161 0 0 0 0	169,765 340 0 1,098 0	248 1,614 0 0 0	4,262 0 0 4,197 0 0	10,910 2,080 0 0 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

<sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

### Table C-19. Federal obligations for research, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

### [Dollars in thousands]

Field of science and engineering	1998	Prelimin	ary
		1999	2000
Total, all fields	30,922,269	33,821,686	34,679,582
Life sciences, total Biological (excluding environmental) Environmental biology Agricultural Medical Life sciences, n.e.c.	13,557,574	15,385,371	15,561,737
	5,706,572	NA	NA
	604,483	NA	NA
	762,785	NA	NA
	5,996,325	NA	NA
	487,409	NA	NA
Psychology, total Biological aspects Social aspects Psychological sciences, n.e.c.	590,968	661,681	686,111
	41,592	NA	NA
	97,490	NA	NA
	451,886	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	4,209,679	4,456,494	4,719,341
	732,150	NA	NA
	819,030	NA	NA
	2,131,758	NA	NA
	526,741	NA	NA
Environmental sciences, total  Atmospheric  Geological  Oceanography  Environmental sciences, n.e.c.	3,061,979	3,171,129	3,208,959
	1,174,426	NA	NA
	603,316	NA	NA
	559,794	NA	NA
	724,443	NA	NA
Mathematics & computer sciences, total	1,836,842	2,008,016	2,131,083
	334,063	NA	NA
	1,398,740	NA	NA
	104,039	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	5,895,423	6,091,572	6,218,596
	1,596,427	NA	NA
	631,111	NA	NA
	190,147	NA	NA
	244,126	NA	NA
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	639,349	NA	NA
	249,551	NA	NA
	789,098	NA	NA
	1,555,614	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	806,129	894,503	889,932
	18,186	NA	NA
	230,450	NA	NA
	20,224	NA	NA
	100,831	NA	NA
	436,438	NA	NA
Other sciences, n.e.c.	963,675	1,152,920	1,263,823

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. NOTE:

NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

n.e.c. = Not elsewhere classified KEY:

## Table C-20. Federal obligations for research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

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								r	age 1 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	30,922,269	13,557,574	590,968	4,209,679	3,061,979	1,836,842	5,895,423	806,129	963,675
Departments:									
Department of Agriculture, total	1,333,905 4,018 689,730	1,037,559 4,018 609,376	410 0 0	87,338 0 64,804	10,355 0 3,551	15,068 0 980	57,335 0 11,019	122,385 0 0	3,455 0 0
Education, & Extension Service Economic Research Service	386,445 71,547	317,284 0	0 0	15,229 0	1,027 0	0 0	17,068 0	35,837 71,547	0 0
Food Safety Inspection Service	125 1,422 172,300	125 1,422 103,485	0 0 410	0 0 7,305	0 0 5,777	0 0 10,755	0 0 29,248	0 0 11,865	0 0 3,455
Stockyards Administration  Nat'l Agricultural Statistics Svc  Rural Business-Cooperative Svc	549 3,333 4,436	549 0 1,300	0 0 0	0 0 0	0 0 0	0 3,333 0	0 0 0	0 0 3,136	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	806,993 5,166 557 305,376 492,128	150,568 0 0 23,880 126,688	506 506 0 0	104,488 0 0 81,272 23,216	250,820 0 0 767 250,053	78,103 3,353 0 54,944 19,806	158,476 0 0 144,513 10,197	21,448 1,307 557 0 19,584	42,584 0 0 0 42,584
National Telecommunications & Information Administration	3,766	0	0	0	0	0	3,766	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	3,969,891 736,879 817,841 822,158 1,593,013	438,542 42,569 157,994 52,085 185,894	74,069 21,725 13,808 27,674 10,862	440,286 133,079 63,891 48,190 195,126	361,300 5,474 75,322 249,896 30,608	658,680 56,219 80,132 40,552 481,777	1,805,538 461,742 333,667 403,761 606,368	176 0 176 0	191,300 16,071 92,851 0 82,378
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction	126,801 856,268 1,094 8,016	0 61,391 0 0	0 0 0 8,016	37,975 44,552 0 0	2,701 6,313 0 0	30,344 407,975 0 0	55,781 321,292 0 0	0 0 0 0	0 14,745 1,094 0
Agency 1	205,073	4,307	0	59,266	6,767	9,638	58,856	0	66,239
Special Operations Command Washington Headquarters Svcs	15,696 380,065	602 119,594	0 2,846	0 53,333	0 14,827	0 33,820	14,794 155,645	0 0	300 0
Department of Education	148,742	11,169	7,319	0	0	1,156	7,704	121,394	0
Department of Energy	3,787,511	255,805	0	1,868,593	350,010	494,617	797,891	0	20,595

## Table C-20. Federal obligations for research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

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								F	age 2 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Dept of Health & Human Svcs, total	12,018,474 2,435 23,456 138,798	10,394,174 0 0 42,076	422,294 0 0 2,193	178,803 0 0 0	34,518 0 0 0	113,978 0 0 12,372	163,397 0 0 0	187,026 2,435 23,456 42,528	524,284 0 0 39,629
Centers for Disease Control & Prevention	343,559	343,559	0	0	0	0	0	0	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary.	142,937 51,236 12,925 11,289,180 13,948	142,937 51,236 12,925 9,801,441 0	0 0 0 420,101 0	0 0 0 178,803 0	0 0 0 34,518 0	0 0 0 101,606 0	0 0 0 163,397 0	0 0 0 104,659 13,948	0 0 0 484,655 0
Planning & Evaluation	13,948	0	0	0	0	0	0	13,948	0
Dept of Housing & Urban Development	9,211	0	0	0	0	123	571	8,313	204
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	502,852 6,626 437,198 29,286 29,742	116,412 0 110,809 0 5,603	0 0 0 0	1,553 0 0 90 1,463	348,475 2,650 320,013 20,371 5,441	6,874 0 4,126 1,155 1,593	8,653 3,876 1,125 3,652 0	20,885 100 1,125 4,018 15,642	0 0 0 0
Department of Justice, total Bureau of Prisons Office of Justice Programs	42,005 4,326 37,679	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	7,000 0 7,000	34,005 3,326 30,679	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	22,079 12,400 2,197 4,592 95	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	95 0 0 0 95	0 0 0 0	21,984 12,400 2,197 4,592 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 2,740	0	0 0	0	0	0 0	0 0	55 2,740	0
Department of State <sup>2</sup>	852	0	0	0	0	0	0	852	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	401,046 5,110 151,550 169,605 21,191	8,738 0 4,499 493 0	25,764 647 24,430 687 0	37,589 0 35,551 2,038 0	23,961 551 20,183 3,152 0	24,242 1,133 0 16,686 1,925	244,711 2,779 49,595 133,662 19,266	8,602 0 0 2,775 0	27,439 0 17,292 10,112 0
Federal Transit Administration National Highway Traffic Safety	7,400	0	0	0	0	0	7,400	0	0
Administration	41,621 4,569	3,746 0	0 0	0 0	0 75	4,162 336	27,886 4,123	5,827 0	0 35
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	52,553 2,676 47,942 684 776 475	0 0 0 0 0	475 0 0 0 0 475	2,676 2,676 0 0 0	776 0 0 0 776 0	0 0 0 0 0	0 0 0 0 0	48,626 0 47,942 684 0	0 0 0 0 0
Department of Veterans Affairs	269,066	214,078	33,016	0	0	0	21,972	0	0

### Table C-20. Federal obligations for research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation	680 477,200 3,025 1,144	0 131,921 0 0	0 0 0 0	0 0 0	0 204,215 0 0	0 0 180 0	0 141,064 1,400 0	680 0 1,445 1,144	0 0 0 0
Agency, total	172,923	105,830	0	0	3,246	0	0	62,032	1,815
Agcy for Internat'l Development <sup>3</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	172,923 455 4,413,651 120 2,289,337	105,830 0 285,857 0 366,845	0 0 20,720 0 5,895	0 455 979,466 120 467,920	3,246 0 1,032,414 0 436,868	0	0 0 1,984,062 0 443,631	62,032 0 387 0 85,028	1,815 0 30,603 0 120,066
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy <sup>2</sup>	51,700 120,000 17,422 809 1,200	39,968 0 48 60	0 0 0 0	0 39,453 0 561 378	0 4,395 0 200 426	0 0 0 0	51,700 0 0 0 0 60	0 35,004 17,422 0 126	0 1,180 0 0 150
United States Information AgencyUS International Trade Commission	258 7,165	0	0 0	0	0	0	258 0	0 7,165	0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 1999

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								F	age 1 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	33,821,686	15,385,371	661,681	4,456,494	3,171,129	2,008,016	6,091,572	894,503	1,152,920
Departments:									
Department of Agriculture, total	1,516,432 4,000 757,942	1,215,127 4,000 680,842	415 0 0	86,497 0 60,850	10,914 0 3,936	14,992 0 886	62,928 0 11,428	122,059 0 0	3,500 0 0
Education, & Extension Service Economic Research Service	506,189 64,966	422,079 0	0 0	18,247 0	1,128 0	0 0	21,885 0	42,850 64,966	
Food Safety Inspection Service	125 1,422 174,500	125 1,422 104,810	0 0 415	0 0 7,400	0 0 5,850	0 0 10,885	0 0 29,615	0 0 12,025	0 0 3,500
Stockyards Administration  Nat'l Agricultural Statistics Svc  Rural Business-Cooperative Svc	549 3,221 3,518	549 0 1,300	0 0 0	0 0 0	0 0 0	0 3,221 0	0 0 0	0 0 2,218	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	881,959 9,854 550 330,365 537,307	166,045 0 0 25,791 140,254	964 964 0 0	112,709 0 0 87,346 25,363	266,838 0 0 817 266,021	88,552 6,398 0 59,614 22,540	172,891 0 0 156,797 12,211	25,137 2,492 550 0 22,095	48,823 0 0 0 48,823
Information Administration	3,883	0	0	0	0	0	3,883	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	4,141,930 752,586 878,206 895,570 1,615,568	518,820 41,702 198,590 57,521 221,007	74,948 19,696 11,777 26,920 16,555	412,268 122,682 59,018 69,180 161,388	383,194 10,120 86,794 262,494 23,786	657,373 59,733 74,062 43,194 480,384	1,836,649 437,050 320,335 436,261 643,003	14,494 14,362 132 0 0	244,184 47,241 127,498 0 69,445
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction	115,170 936,546 2,389 8,151	96,069 0 0	0 0 0 8,151	39,485 28,744 0 0	292 0 0 0	21,423 423,436 0 0	52,820 382,161 0 0	0 0 0	1,150 6,136 2,389 0
Agency <sup>1</sup>	183,996	3,864	0	53,175	6,072	8,648	52,807	0	59,430
Special Operations Command Washington Headquarters Svcs	18,657 350,659	815 120,259	0 8,404	0 39,984	0 17,422	0 26,877	17,502 137,713	0 0	340 0
Department of Education	153,917	11,758	7,705	0	0	1,217	8,110	125,127	0
Department of Energy	4,130,134	287,840	0	2,012,184	334,842	622,876	850,650	0	21,742

Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 1999

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								H	age 2 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Dept of Health & Human Svcs, total	13,697,084 1,160 18,789 160,923	11,838,105 0 0 37,952	482,616 0 0 1,997	204,561 0 0 0	39,491 0 0 0	127,229 0 0 10,986	186,936 0 0 0	192,635 1,160 18,789 38,950	625,511 0 0 71,038
Centers for Disease Control & Prevention	382,559	382,559	0	0	0	0	0	0	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary.	141,229 50,000 12,957 12,915,467 14,000	141,229 50,000 12,957 11,213,408 0	0 0 0 480,619 0	0 0 0 204,561 0	0 0 0 39,491 0	0 0 0 116,243 0	0 0 0 186,936 0	0 0 0 119,736 14,000	0 0 0 554,473 0
Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0
Dept of Housing & Urban Development	21,313	0	0	0	0	278	1,321	19,239	475
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	533,974 6,050 469,124 29,056 29,744	132,416 0 126,813 0 5,603	0 0 0 0	2,193 0 0 634 1,559	363,521 2,420 335,935 19,801 5,365	6,796 0 4,126 1,093 1,577	9,395 3,530 1,125 4,740 0	19,653 100 1,125 2,788 15,640	0 0 0 0
Department of Justice, total Bureau of Prisons Office of Justice Programs	49,518 3,950 45,568	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	34,118 2,950 31,168	14,400 0 14,400
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	21,367 12,400 2,000 5,010 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	100 0 0 0 100	0 0 0 0	21,267 12,400 2,000 5,010	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	57 1,800	0	0 0	0	0	0 0	0 0	57 1,800	0
Department of State <sup>2</sup>	964	0	0	0	0	0	0	964	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	490,542 4,491 150,000 250,622 25,113	9,772 0 4,065 1,177 0	28,703 713 26,282 1,708 0	49,942 0 44,408 5,534 0	31,540 680 21,303 9,457 0	9,308 1,039 0 761 1,630	322,985 2,059 37,158 215,753 23,483	8,177 0 0 3,170 0	30,115 0 16,784 13,062 0
Federal Transit Administration National Highway Traffic Safety	4,100	0	0	0	0	0	4,100	0	0
Administration	50,350 5,866	4,530 0	0 0	0	0 100	5,539 339	35,274 5,158	5,007 0	0 269
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	60,703 2,236 55,496 766 1,679 526	0 0 0 0 0	526 0 0 0 0 526	2,276 2,236 0 0 40	1,639 0 0 0 1,639 0	0 0 0 0 0	0 0 0 0 0	56,262 0 55,496 766 0	0 0 0 0 0
Department of Veterans Affairs	311,149	254,966	38,471	0	0	0	17,712	0	0

### Table C-21. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 1999

### [Dollars in thousands]

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									3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	738 462,863 4,178 1,097 163,220	122,808 0 0 100,277	0 0 0 0	0 0 0 0	201,127 0 0 2,216	0 0 134 0	0 138,928 1,516 0	2,528 1,097 60,667	0 0 0 0 0
Agcy for Internat'l Development <sup>3</sup> Library of Congress National Aeronautics & Space Admin	163,220 595	100,277 0	0	0 595	2,216 0	0	0	60,667 0	0
National Aeronautics & Space Admin National Archives & Records Admin	4,433,117 120	284,094	20,345	1,018,603 120	1,050,589	79,316	1,948,330	407	31,433
National Science Foundation	2,512,892	403,208	6,488	514,492	480,797	399,345	483,920	93,176	131,466
Nuclear Regulatory Commission Smithsonian Institution Social Security Administration US Arms Control & Disarmament Agcy <sup>2</sup> United States Information Agency US International Trade Commission	49,201 122,000 53,656 50 100 6,873	0 40,135 0 0 0	0 0 0 0 0	0 40,004 0 50 0	0 4,421 0 0 0	0 0 0 0 0	49,201 0 0 0 100 0	0 36,229 53,656 0 0 6,873	0 1,211 0 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 2000

Page 1 of 3

								F	age 1 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	34,679,582	15,561,737	686,111	4,719,341	3,208,959	2,131,083	6,218,596	889,932	1,263,823
Departments:									
Department of Agriculture, total	1,474,218 4,268 778,840	1,187,314 4,268 699,614	415 0 0	87,134 0 62,528	10,886 0 4,045	15,016 0 910	62,115 0 11,743	107,838 0 0	3,500 0 0
Education, & Extension Service Economic Research Service	451,032 55,628	374,393 0	0	17,206 0	991 0	0 0	20,757 0	37,685 55,628	0 0
Food Safety Inspection Service	125 1,422 174,500	125 1,422 104,810	0 0 415	0 0 7,400	0 0 5,850	0 0 10,885	0 0 29,615	0 0 12,025	0 0 3,500
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	682 3,221 4,500	682 0 2,000	0 0 0	0 0 0	0 0 0	0 3,221 0	0 0 0	0 0 2,500	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	859,738 4,991 550 339,607 508,396	150,075 0 0 26,446 123,629	488 488 0 0	113,413 0 0 88,915 24,498	267,173 0 0 820 266,353	84,842 3,241 0 61,547 20,054	179,714 0 0 161,879 11,641	21,253 1,262 550 0 19,441	42,780 0 0 0 42,780
Information Administration	6,194	0	0	0	0	0	6,194	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	4,116,260 723,365 771,815 902,250 1,718,830	434,258 42,529 93,970 58,795 238,964	90,075 19,519 15,036 28,063 27,457	409,644 119,283 60,089 75,153 155,119	350,629 10,659 46,766 266,706 26,498	625,631 62,106 83,214 45,492 434,819	1,885,739 452,466 356,433 428,041 648,799	1,693 1,500 193 0 0	318,591 15,303 116,114 0 187,174
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction	74,831 1,017,381 1,966 8,261	0 106,672 0 0	0 0 0 8,261	21,248 31,260 0 0	28 0 0 0	6,241 387,199 0 0	47,287 373,499 0 0	0 0 0	27 118,751 1,966 0
Agency <sup>1</sup>	204,689	4,298	0	59,155	6,755	9,620	58,746	0	66,115
Special Operations Command Washington Headquarters Svcs	17,269 394,433	640 127,354	0 19,196	0 43,456	0 19,715	0 31,759	16,314 152,953	0 0	315 0
Department of Education	172,896	11,857	8,209	0	0	4,104	9,121	139,605	0
Department of Energy	4,373,242	251,563	0	2,107,392	327,186	748,479	918,849	0	19,773

Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 2000

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								ŀ	age 2 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Dept of Health & Human Svcs, total	14,100,245 1,085 28,049 197,255	12,166,300 0 0 42,239	492,369 0 0 2,223	208,615 0 0 0	40,274 0 0 0	130,774 0 0 12,227	190,641 0 0 0	208,594 1,085 28,049 43,351	662,678 0 0 97,215
Centers for Disease Control & Prevention	468,559	468,559	0	0	0	0	0	0	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary.	151,745 55,000 13,081 13,171,471 14,000	151,745 55,000 13,081 11,435,676 0	0 0 0 490,146 0	0 0 0 208,615 0	0 0 0 40,274 0	0 0 0 118,547 0	0 0 0 190,641 0	0 0 0 122,109 14,000	0 0 0 565,463 0
Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0
Dept of Housing & Urban Development	18,054	0	0	0	0	235	1,119	16,298	402
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	552,058 7,436 484,227 28,565 31,830	143,968 0 138,365 0 5,603	0 0 0 0	1,620 0 0 61 1,559	367,469 2,974 339,199 19,931 5,365	6,988 0 4,311 1,100 1,577	10,104 4,262 1,176 4,666 0	21,909 200 1,176 2,807 17,726	0 0 0 0
Department of Justice, total Bureau of Prisons Office of Justice Programs	25,041 4,000 21,041	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	24,041 3,000 21,041	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	22,141 12,400 1,331 5,255 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	100 0 0 0 100	0 0 0 0	22,041 12,400 1,331 5,255 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 3,000	0	0 0	0	0	0 0	0 0	55 3,000	0
Department of State <sup>2</sup>	964	0	0	0	0	0	0	964	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	675,559 5,667 173,000 406,024 23,601	12,004 0 4,829 1,890 0	30,147 986 26,380 2,781 0	51,952 0 42,961 8,991 0	35,674 691 19,608 15,275	10,471 1,554 0 1,236 1,000	484,192 2,436 60,532 349,440 22,601	10,962 0 0 5,091	40,157 0 18,690 21,320 0
Federal Transit Administration National Highway Traffic Safety	4,100	0	0	0	0	0	4,100	0	0
AdministrationResearch & Special Programs Admin	58,713 4,454	5,285 0	0 0	0 0	0 100	6,458 223	41,099 3,984	5,871 0	0 147
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	74,845 2,314 70,217 855 900 559	0 0 0 0 0	559 0 0 0 0 559	2,914 2,314 0 0 600 0	300 0 0 0 300 0	0 0 0 0 0	0 0 0 0 0	71,072 0 70,217 855 0	0 0 0 0 0
Department of Veterans Affairs	307,000	252,000	38,000	0	0	0	17,000	0	0

### Table C-22. Preliminary Federal obligations for research, by agency and field of science and engineering: fiscal year 2000

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission Consumer Product Safety Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	750 1,168 446,900 2,747 1,379	0 0 123,559 0 0	0 0 0 0	0 0 0 0	0 0 191,242 0 0	0 0 0 78 0	0 1,168 132,099 1,824 0		0 0 0 0
Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>3</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	143,573 143,573 614 4,392,011 120	82,978 82,978 0 269,779 0	0 0 0 18,358 0	0 0 614 1,140,045 120	2,479 2,479 0 1,093,089 0	0 0 0 74,029 0	0 0 0 1,762,430 0	58,017 58,017 0 468 0	99 99 0 33,813 0
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration United States Information Agency US International Trade Commission	2,698,326 46,594 129,000 36,895 100 7,144	433,647 0 42,435 0 0	6,991 0 0 0 0	553,576 0 42,302 0 0	517,885 0 4,673 0 0	429,836 0 0 0 0 0	515,787 46,594 0 0 100	99,854 0 38,310 36,895 0 7,144	140,750 0 1,280 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-23. Federal obligations for research in psychology and life sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

					Page 1 of 2							
		Psych	iology		Life sciences							
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psychological sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sci- ences, n.e.c.		
Total, all agencies	590,968	41,592	97,490	451,886	13,557,574	5,706,572	604,483	762,785	5,996,325	487,409		
Departments:												
Department of Agriculture, total	410 0 0	0 0 0	410 0 0	0 0 0	1,037,559 4,018 609,376	128,843 0 39,460	224,489 0 71,720	659,927 4,018 486,912	24,300 0 11,284	0 0 0		
Education, & Extension Service Food Safety Inspection Service	0 0	0 0	0 0	0 0	317,284 125	67,693 125	77,159 0	163,921 0	8,511 0	0 0		
Foreign Agricultural Service Forest Service Grain Inspection Packers &	0 410	0 0	0 410	0 0	1,422 103,485	0 21,565	0 75,610	1,422 1,805	0 4,505	0		
Stockyards AdministrationRural Business-Cooperative Svc	0	0	0	0	549 1,300	0	0	549 1,300	0	0		
Department of Commerce, total	506 506	0	0	506 506	150,568 0	35,491 0	75,544 0	24,503 0	11,312 0	3,718 0		
Nat'l Inst of Standards & TechNat'l Oceanic & Atmospheric Admin	0	0	0	0	23,880 126,688	14,032 21,459	75,544	1,089 23,414	5,901 5,411	2,858 860		
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	74,069 21,725 13,808 27,674 10,862	28,661 325 0 26,029 2,307	38,503 18,470 11,478 0 8,555	6,905 2,930 2,330 1,645 0	438,542 42,569 157,994 52,085 185,894	137,328 12,441 6,251 9,869 108,767	17,454 9,154 0 7,895 405	539 0 0 0 539	254,965 9,367 148,605 21,412 75,581	28,256 11,607 3,138 12,909 602		
Defense Adv Rsch Projects Agcy Defense Logistics Agency Defense Threat Reduction	0 8,016	0 0	0 8,016	0 0	61,391 0	50,840 0	0 0	0 0	10,551 0	0		
Agency 1 Special Operations Command Washington Headquarters Svcs	0 0 2,846	0 0 2,307	0 0 539	0 0 0	4,307 602 119,594	3,144 0 54,783	0 0 405	0 0 539	1,163 0 63,867	0 602 0		
Department of Education	7,319	0	4,237	3,082	11,169	0	0	0	2,310	8,859		
Department of Energy	0	0	0	0	255,805	189,119	8,500	0	53,695	4,491		
Dept of Health & Human Svcs, total	422,294 2,193	12,866 0	6,618 279	402,810 1,914	10,394,174 42,076	4,726,379 0	87 0	0 0	5,284,521 39,447	383,187 2,629		
Prevention	0 0 0	0 0 0	0 0 0	0 0 0	343,559 142,937 51,236	0 142,937 0	0 0 0	0 0 0	343,559 0 0	0 0 51,236		
Health Resources & Services Admin National Institutes of Health	0 420,101	0 12,866	0 6,339	0 400,896	12,925 9,801,441	0 4,583,442	0 87	0 0	12,925 4,888,590	0 329,322		
Department of the Interior, total	0 0 0	0 0 0	0 0 0	0 0 0	116,412 110,809 5,603	61,893 58,063 3,830	54,023 52,558 1,465	496 188 308	0 0 0	0 0 0		
Department of Justice, totalBureau of Prisons	500 500	0	300 300	200 200	0	0 0	0 0	0 0	0 0	0		
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration National Highway Traffic Safety	25,764 647 24,430 687	0 0 0	25,764 647 24,430 687	0 0 0	8,738 0 4,499 493	0 0 0	473 0 0 473	20 0 0 20	4,499 0 4,499 0	3,746 0 0 0		
Administration	0	0	0	0	3,746	0	0	0	0	3,746		
Department of the Treasury, total	475 475	0 0	0 0	475 475	0	0 0	0 0	0 0	0	0 0		
Department of Veterans Affairs	33,016	0	0	33,016	214,078	0	0	0	214,078	0		

### Table C-23. Federal obligations for research in psychology and life sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

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										.9	
		Psych	nology		Life sciences						
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psychological sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sci- ences, n.e.c.	
Other agencies:											
Environmental Protection Agency Internat'l Development Cooperation	0	0	0	0	131,921	0	106,900	0	25,021	0	
Agency, total	0	0	0	0	105,830 105,830		0	76,685 76,685	0	29,145 29,145	
National Aeronautics & Space Admin National Science Foundation	20,720 5,895		15,763 5,895	4,892 0	285,857 366,845	126,817 281,965	10,854 84,880	615 0	121,624 0	25,947 0	
Smithsonian Institution	0 0 0	0 0 0	0 0 0	0 0 0	39,968 48 60	18,689 48 0	21,279 0 0	0 0 0	0 0 0	0 0 60	

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B. NOTE:

KEY: n.e.c. = Not elsewhere classified

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

## Table C-24. Federal obligations for research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

		Phys	ical sciend	ces	Environmental scie					ciences		
Agency and subdivision	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.		
Total, all agencies	4,209,679	732,150	819,030	2,131,758	526,741	3,061,979	1,174,426	603,316	559,794	724,443		
Departments:												
Department of Agriculture, total	87,338 64,804	0	82,210 61,426	5,128 3,378	0	10,355 3,551	8,937 3,440	1,418 111	0 0	0		
Education, & Extension Service Forest Service	15,229 7,305	0 0	15,229 5,555	0 1,750	0 0	1,027 5,777	1,027 4,470	0 1,307	0 0	0 0		
Department of Commerce, total	104,488 81,272 23,216	371 371 0	41,569 28,885 12,684	62,213 51,681 10,532	335 335 0	250,820 767 250,053	105,181 0 105,181	4,698 767 3,931	126,409 0 126,409	14,532 0 14,532		
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	440,286 133,079 63,891 48,190 195,126	6,270 0 0 0 6,270	124,332 34,478 18,004 25,001 46,849	238,376 98,520 29,691 15,294 94,871	71,308 81 16,196 7,895 47,136	361,300 5,474 75,322 249,896 30,608	51,863 3,352 14,622 26,435 7,454	11,242 1,455 3,856 4,934 997	112,459 0 0 97,429 15,030	185,736 667 56,844 121,098 7,127		
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	37,975 44,552	0	20,519 0	17,456 28,826	0 15,726	2,701 6,313	2,701 0	0 0	0 6,313	0		
Agency 1 Washington Headquarters Svcs	59,266 53,333	0 6,270	0 26,330	27,856 20,733	31,410 0	6,767 14,827	0 4,753	0 997	0 8,717	6,767 360		
Department of Energy	1,868,593	0	236,788	1,321,650	310,155	350,010	90,544	84,298	4,244	170,924		
Dept of Health & Human Svcs, total	178,803 178,803	0 0	158,732 158,732	20,071 20,071	0 0	34,518 34,518	0 0	0 0	0 0	34,518 34,518		
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	1,553 0 0 90 1,463	0 0 0 0	917 0 0 0 917	90 0 0 90	546 0 0 0 546	348,475 2,650 320,013 20,371 5,441	3,445 0 0 1,092 2,353	200,987 0 199,617 1,010 360	17,491 0 0 17,128 363	126,552 2,650 120,396 1,141 2,365		
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Research & Special Programs Admin	37,589 0 35,551 2,038 0	0 0 0 0	0 0 0 0	35,815 0 35,551 264 0	1,774 0 0 1,774 0	23,961 551 20,183 3,152 75	21,314 0 20,183 1,131 0	0 0 0 0	551 551 0 0 0	2,096 0 0 2,021 75		
Department of the Treasury, total Bureau of Engraving & Printing United States Customs Service	2,676 2,676 0	0 0 0	243 243 0	25 25 0	2,408 2,408 0	776 0 776	0 0 0	0 0 0	0 0 0	776 0 776		

### Table C-24. Federal obligations for research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

Page 2 of 2

		Phys	ical sciend	ces		Environmental sciences					
Agency and subdivision	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.	
Other agencies:											
Environmental Protection AgencyInternat'l Development Cooperation	0	0	0	0	0	204,215	95,230	13,287	0	95,698	
Agency, total	0	0	0	0	0	3,246	0	0	0	3,246	
Agcy for Internat'l Development <sup>2</sup>	0	0	0	0	0	3,246	0	0	0	3,246	
Library of Congress	455	0	364	0	91	0	0	0	0	0	
National Aeronautics & Space Admin	979,466	575,093	48,325	317,333	38,715	1,032,414	662,846	185,533	110,437	73,598	
National Archives & Records Admin	120	0	70	50	0	0	0	0	0	0	
National Science Foundation	467,920	113,248	124,019	129,376	101,277	436,868	134,858	97,402	187,916	16,692	
Smithsonian Institution	39,453	37,168		1,625	0	4,395	83	4,025	287	0	
Tennessee Valley Authority	561	0	561	0	0	200	125	0	0	75	
US Arms Control & Disarmament Agcy <sup>3</sup>	378	0	240	6	132	426	0	426	0	0	

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NOTE:

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY: = Not elsewhere classified

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of

## Table C-25. Federal obligations for research in engineering, by agency and detailed field of engineering: fiscal year 1998

### [Dollars in thousands]

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								F	age 1 01 2
Agency and subdivision	Total	Aero- nautical	Astro- nauti- cal	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	5,895,423	1,596,427	631,111	190,147	244,126	639,349	249,551	789,098	1,555,614
Departments:									
Department of Agriculture, total	57,335 11,019	0	0 0	8,069 5,904	5,745 1,698	635 569	3,405 675	0 0	39,481 2,173
Education, & Extension Service Forest Service	17,068 29,248	0 0	0 0	0 2,165	0 4,047	0 66	0 2,730	0 0	17,068 20,240
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	158,476 144,513 10,197	0 0 0	0 0 0	6,813 6,813 0	23,129 23,129 0	41,566 32,137 5,663	3,642 3,642 0	37,459 37,459 0	45,867 41,333 4,534
Information Administration	3,766	0	0	0	0	3,766	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,805,538 461,742 333,667 403,761 606,368	308,623 199,253 32,717 33,855 42,798	36,643 33,870 904 0 1,869	34,798 1,824 13,226 4,746 15,002	51,871 9,700 33,719 0 8,452	89,379 120,061 140,750	179,151 34,689 63,691 48,186 32,585	340,555 57,253 27,867 64,921 190,514	346,659 35,774 41,482 111,303 158,100
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	55,781 321,292	1,575 38,717	994 0	3,570 1,929	0 361	13,826 49,576	0 89	13,515 136,335	22,301 94,285
Agency <sup>1</sup> Special Operations Command Washington Headquarters Svcs	58,856 14,794 155,645	235 0 2,271	0 0 875	883 0 8,620	5,886 0 2,205	23,013 0 70,633	8,946 0 23,550	0 0 40,664	19,893 14,794 6,827
Department of Education	7,704	0	0	0	0	0	0	0	7,704
Department of Energy	797,891	0	0	91,325	37,979	25,230	17,499	260,618	365,240
Dept of Health & Human Svcs, total National Institutes of Health	163,397 163,397	0	0 0	0	0 0	0 0	0	0	163,397 163,397
Dept of Housing & Urban Development	571	0	0	0	0	0	0	0	571
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service	8,653 3,876 1,125 3,652	0 0 0	0 0 0 0	3,094 1,300 0 1,794	4,468 2,250 938 1,280	187 0 187 0	0 0 0 0	904 326 0 578	0 0 0
Department of Justice, total Office of Justice Programs	7,000 7,000	0 0	0 0	0	0	0	0	0	7,000 7,000
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	244,711 2,779 49,595 133,662 19,266	0 0 0 0	0 0 0 0	18 0 0 18 0	82,550 326 44,315 33,385 4,524	2,920 1,285 0 0 1,635	19,299 570 2,769 0 5,555	25,071 598 2,511 21,068 425	114,853 0 0 79,191 7,127
Federal Transit Administration	7,400	0	0	0	0	0	0	0	7,400
National Highway Traffic Safety Administration Research & Special Programs Admin	27,886 4,123	0 0	0 0	0	0 0	0	10,405 0	0 469	17,481 3,654
Department of Veterans Affairs	21,972	0	0	0	0	0	0	0	21,972

## Table C-25. Federal obligations for research in engineering, by agency and detailed field of engineering: fiscal year 1998

### [Dollars in thousands]

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Agency and subdivision	Total	Aero- nautical	Astro- nauti- cal	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Other agencies:									
Environmental Protection Agency	141,064 1,400 1,984,062 443,631 51,700	0 0 1,287,804 0 0	0 0 594,468 0 0	3,109 0 2,783 40,138 0	0 0 118 38,266 0	0 1,250 20,076 40,247 0	18,372	0 0 18,038 106,453 0	137,955 150 42,403 210,344 51,700
US Arms Control & Disarmament Agcy <sup>2</sup> United States Information Agency	60 258	0	0 0	0 0	0 0	0	0	0	60 258

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NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>&</sup>lt;sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Table C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

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				Page 1 of 2							
	Mathe	matics and	l computer s	ciences	Social sciences						
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.	
Total, all agencies	1,836,842	334,063	1,398,740	104,039	806,129	18,186	230,450	20,224	100,831	436,438	
Departments:											
Department of Agriculture, total	980	15,068 980	0	0	122,385	275 0	112,479	0	9,631	0 0	
Education, & Extension Service Economic Research Service Forest Service	0	0 0 10,755	0 0 0	0 0 0	35,837 71,547 11,865	0 0 275	27,256 71,547 10,540	0 0 0	8,581 0 1,050	0 0 0	
Nat'l Agricultural Statistics SvcRural Business-Cooperative Svc		3,333 0	0	0	0 3,136	0 0	0 3,136	0 0	0	0	
Department of Commerce, total	3,353 0 54,944	12,610 0 0 3,449 9,161	57,589 0 0 46,944 10,645	7,904 3,353 0 4,551	21,448 1,307 557 0 19,584	0 0 0 0	5,414 0 557 0 4,857	8,228 0 0 0 8,228	6,499 0 0 0 6,499	1,307 1,307 0 0	
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	56,219 80,132 40,552	63,966 7,689 11,252 13,816 31,209	561,667 23,633 65,589 26,736 445,709	33,047 24,897 3,291 0 4,859	176 0 176 0	0 0 0 0	0 0 0 0	0 0 0 0	176 0 176 0	0 0 0 0	
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction		0 21,542	27,000 386,433	3,344 0	0	0	0	0 0	0	0	
Agency <sup>1</sup> Washington Headquarters Svcs		9,667	9,638 22,638	0 1,515	0 0	0	0 0	0	0	0	
Department of Education	1,156	0	1,156	0	121,394	0	0	0	0	121,394	
Department of Energy	494,617	93,586	395,801	5,230	0	0	0	0	0	0	
Dept of Health & Human Svcs, total Administration on Aging	0 0 12,372	47,639 0 0 309 47,330	66,339 0 0 12,063 54,276	0 0 0 0	187,026 2,435 23,456 42,528 104,659	0 0 0 0	39,092 0 0 39,092 0	0 0 0 0	1,179 0 0 921 258	146,755 2,435 23,456 2,515 104,401	
Office of the Secretary, total	0	0	0	0	13,948	0	0	0	0	13,948	
Planning & Evaluation	. 0	0	0	0	13,948	0	0	0	0	13,948	
Dept of Housing & Urban Development	123	0	0	123	8,313	0	6,972	133	620	588	
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	0 4,126 1,155	904 0 844 60 0	0 3,282	0 0 0 0	20,885 100 1,125 4,018 15,642	3,761 0 0 597 3,164	2,593 50 0 2,534 9	0 0 0 0	1,543 0 656 887 0	12,988 50 469 0 12,469	
Department of Justice, total Bureau of Prisons Office of Justice Programs	500	0 0 0		500 500 0	34,005 3,326 30,679	0 0 0	100 100 0	0 0 0	31,879 1,200 30,679	2,026 2,026 0	
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	0 0	0 0 0 0	95 0 0 0 95	0 0 0 0	21,984 12,400 2,197 4,592 0	0	21,984 12,400 2,197 4,592 0	0 0 0 0	0 0 0 0	0 0 0 0 0	
Pension Benefit Guaranty CorpPension & Welfare Benefits Admin		0	0	0	55 2,740	0 0	55 2,740	0 0	0	0	
Department of State <sup>2</sup>	0	0	0	0	852	0	51	409	128	264	

### Table C-26. Federal obligations for research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

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										aye 2 UI Z	
	Mathe	matics and	computer s	ciences	Social sciences						
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.	
Department of Transportation, total Coast Guard Federal Highway Administration Federal Railroad Administration National Highway Traffic Safety	24,242 1,133 16,686 1,925	212 0 212 0	17,827 1,133 15,739 955	6,203 0 735 970	8,602 0 2,775 0	0 0 0 0	1,943 0 1,943 0	240 0 240 0	0 0 0 0	6,419 0 592 0	
Administration	4,162 336	0 0	0 0	4,162 336	5,827 0	0 0	0 0	0 0	0 0	5,827 0	
Department of the Treasury, total	0 0 0	0 0 0	0 0 0	0 0 0	48,626 47,942 684	0 0 0	2,850 2,166 684	0 0 0	0 0 0	45,776 45,776 0	
Other agencies:											
Appalachian Regional Commission Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation	0 180 0	0 0 0	0 180 0	0 0 0	680 1,445 1,144	0 0 0	680 1,445 1,144		0 0 0	0 0 0	
Agency, total	0	0	0 0	0 0	62,032 62,032	0 0	7,109 7,109	5,914 5,914	43,169 43,169	5,840 5,840	
National Aeronautics & Space Admin  National Science Foundation  Smithsonian Institution  Social Security Administration  US Arms Control & Disarmament Agcy <sup>2</sup> US International Trade Commission	80,142 363,084 0 0 0	3,823 96,255 0 0 0	25,287 266,829 0 0 0	51,032 0 0 0 0 0	387 85,028 35,004 17,422 126 7,165	0 11,476 2,674 0 0	0 19,429 0 0 0 7,165	0 0 126	250 5,385 372 0 0	137 43,564 31,958 17,422 0	

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1998 (revised)

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						Extramu	ıral			ge 1 of 2
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	15,613,012	2,917,780	1,119,681	326,405	7,952,176	1,642,306	1,397,565	121,849	84,876	50,374
Departments:										
Department of Agriculture, total	603,763 401,711	421,443 378,413	3,798 0	0	173,716 20,212	0	2,730 1,420	0 0	404 5	1,672 1,661
Education, & Extension Service Economic Research Service Food Safety Inspection Service	163,451 7,155 125	8,576 7,155 125	3,797 0 0	0 0 0	149,481 0 0	0 0 0	1,208 0 0	0 0 0	389 0 0	0 0 0
Foreign Agricultural Service Forest Service Nat'l Agricultural Statistics Svc	924 29,300 1,097	721 25,356 1,097	0 1 0	0 0 0	203 3,820 0	0 0 0	0 102 0	0 0 0	0 10 0	0 11 0
Department of Commerce, total  Bureau of the Census  Nat'l Inst of Standards & Tech  Nat'l Oceanic & Atmospheric Admin	39,593 550 38,636 407	35,394 550 34,639 205	456 0 456 0	0 0 0 0	3,521 0 3,521 0	20 0 20 0	102 0 0 102	0 0 0 0	100 0 0 100	0 0 0 0
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,030,839 185,564 181,955 328,975 334,345	309,521 85,523 87,492 109,119 27,387	123,947 24,014 29,610 32,956 37,367	404 0 100 226 78	546,477 68,477 58,001 157,677 262,322	11,416 417 206 6,123 4,670	25,250 4,613 2,267 16,896 1,474	3,850 0 3,155 0 695	0 0 0 0	9,974 2,520 1,124 5,978 352
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	78,259 256,086	6,367 21,020	35,394 1,973	0 78	29,507 232,815	4,670 0	1,474 0	695 0	0 0	152 200
Department of Education	2,063	146	0	0	1,917	0	0	0	0	0
Department of Energy	2,028,805	46,895	48,315	231,118	449,065	1,100,508	44,076	104,964	2,800	1,064
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	7,355,363 1,050 7,354,313	1,263,026 1,050 1,261,976	322,957 0 322,957	93,364 0 93,364	0	18,555 0 18,555	1,098,686 0 1,098,686	10,596 0 10,596	57,352 0 57,352	23,014 0 23,014
Department of the Interior, total	48,733 48,187 546	45,384 45,344 40	0 0 0	0 0 0	3,168 2,782 386	0 0 0	120 0 120	0 0 0	61 61 0	0 0 0
Department of Justice, total	16,000 16,000	250 250	3,545 3,545	0	8,825 8,825	0 0	3,200 3,200	0	180 180	0
Department of Labor, total	11,100 11,100	7,100 7,100	0 0	0	4,000 4,000	0 0	0	0 0	0 0	0 0
Department of Transportation, total Federal Highway Administration	34,971 34,971	8,458 8,458	3,871 3,871	627 627	3,743 3,743	3,370 3,370	971 971	0	13,931 13,931	0 0
Department of the Treasury, totalBureau of Engraving & Printing	34 34	34 34	0 0	0	0 0	0 0	0	0 0	0 0	0 0
Department of Veterans Affairs	120,015	120,015	0	0	0	0	0	0	0	0

### Table C-27. Federal obligations for basic research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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								,	gc 2 01 2
					Extramu	ural			
				United St	ates and ter	ritories			
Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
1,815 2,023,793	218 218 506,613	0 0 559,885	0 0 0 892	18 18 495,494	0 0 369,358		0 0 0 2,239	1,961 0 0 4,547	299 218 218 4,939
2,118,677 120,000 48	16,140 120,000 48	41,265 0 0	0	1,775,848 0 0	139,079 0 0	133,411 0 0	200 0 0	3,540 0 0	9,194 0 0
	57,400 1,815 1,815 2,023,793 2,118,677 120,000	57,400 17,095 1,815 218 1,815 218 2,023,793 506,613 2,118,677 16,140 120,000 120,000	mural 1 Industrial firms  57,400 17,095 11,642  1,815 218 0 1,815 218 0 2,023,793 506,613 559,885 2,118,677 16,140 41,265  120,000 120,000 0	mural 1 Industrial firms FFRDCs admin by industrial firms  57,400 17,095 11,642 0  1,815 218 0 0  1,815 218 0 0  2,023,793 506,613 559,885 892 2,118,677 16,140 41,265 0  120,000 120,000 0 0	Total Intramural 1 Industrial firms FFRDCs admin by industrial firms Universities and colleges  57,400 17,095 11,642 0 18,571  1,815 218 0 0 0 18 1,815 218 0 0 18 2,023,793 506,613 559,885 892 495,494 2,118,677 16,140 41,265 0 1,775,848  120,000 120,000 0 0 0 0	Total Intramural 1 Industrial firms FFRDCs admin by industrial firms Universities and colleges FRDCs admin by industrial firms Colleges FRDCs admin by univs and colleges Colleges Industrial firms Coll	Mural   Industrial firms   FFRDCs admin by intrial dustrial firms   Universities admin by universand colleges   FFRDCs admin by universand colleges   Other nonprofit universand colleges   FFRDCs admin by universal colleges   FFRDCS a	Total	Total   Intramural   Industrial firms   Industria

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-28. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1999

		Pa							ge 1 of 2	
						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	17,366,858	3,107,467	1,292,460	336,921	8,931,601	1,807,172	1,601,450	144,871	89,289	55,627
Departments:										
Department of Agriculture, total	715,731 449,768	465,963 421,948	6,014 0	0	238,783 24,587	0 0	2,755 1,447	0 0	424 5	1,792 1,781
Education, & Extension Service Economic Research Service Food Safety Inspection Service	227,657 6,497 125	9,856 6,497 125	6,013 0 0	0 0 0	210,173 0 0	0 0 0	1,206 0 0	0 0 0	409 0 0	0 0 0
Foreign Agricultural Service Forest Service Nat'l Agricultural Statistics Svc	924 29,700 1,060	721 25,756 1,060	0 1 0	0 0 0	203 3,820 0	0 0 0	0 102 0	0 0 0	0 10 0	0 11 0
Department of Commerce, total Bureau of the Census Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	45,673 1,049 40,765 3,859	41,152 1,049 36,709 3,394	491 0 491 0	0 0 0 0	3,792 0 3,545 247	20 0 20 0	118 0 0 118	0 0 0 0	100 0 0 100	0 0 0 0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	1,030,259 195,251 178,913 344,564 311,531	306,745 71,432 82,476 120,484 32,353	110,034 23,264 25,468 33,552 27,750	417 0 90 247 80	547,628 85,250 53,645 163,638 245,095	5,487 299 125 1,498 3,565	34,208 12,133 2,013 18,400 1,662	15,727 30 14,796 200 701	0 0 0 0	10,013 2,843 300 6,545 325
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	56,391 255,140	4,588 27,765	25,504 2,246	0 80	21,261 223,834	3,365 200	1,062 600	501 200	0 0	110 215
Department of Education	2,050	135	0	0	1,915	0	0	0	0	0
Department of Energy	2,230,019	45,322	117,473	225,950	448,316	1,234,576	39,823	114,185	3,250	1,124
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	8,428,388 1,102 8,427,286	1,343,794 1,102 1,342,692	375,575 0 375,575	108,576 0 108,576	5,195,393 0 5,195,393	21,578 0 21,578	1,277,691 0 1,277,691	12,322 0 12,322	66,696 0 66,696	26,763 0 26,763
Department of the Interior, total	50,829 50,279 550	47,426 47,386 40	0 0 0	0 0 0	3,220 2,832 388	0 0 0	122 0 122	0 0 0	61 61 0	0 0 0
Department of Justice, total	20,075 20,075	275 275	4,100 4,100	0	10,375 10,375	0	4,725 4,725	0	600 600	0
Department of Labor, total	11,100 11,100	11,100 11,100	0 0	0	0 0	0 0	0 0	0 0	0 0	0
Department of Transportation, total Federal Highway Administration	39,897 39,897	11,999 11,999	11,330 11,330	1,028 1,028	7,000 7,000	390 390	1,028 1,028	0 0	7,122 7,122	0
Department of the Treasury, totalBureau of Engraving & Printing	38 38	38 38	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Department of Veterans Affairs	139,855	139,855	0	0	0	0	0	0	0	0

## Table C-28. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 1999

### [Dollars in thousands]

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									ıa	ge 2 01 2
						Extrami	ural			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Environmental Protection AgencyInternat'l Development Cooperation	75,663	22,534	15,346	0	24,480	0	10,324	0	2,585	394
Agency, total ' Agcy for Internat'l Development <sup>2</sup> National Aeronautics & Space Admin National Science Foundation Smithsonian Institution	60 60 2,122,562 2,332,659 122,000	8 531,354 17,767 122,000	0 0 606,664 45,433 0	0 0 950 0 0	0 0 495,494 1,955,205 0	0 0 391,995 153,126 0	46 46 83,724 146,886 0	0 0 2,417 220 0	0 0 4,553 3,898 0	

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-29. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 2000

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			Extramural									
					United St	ates and ter	ritories					
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign		
Total, all agencies	18,209,439	3,336,199	1,439,629	338,845	9,226,882	1,969,382	1,623,730	129,012	87,754	58,006		
Departments:												
Department of Agriculture, total	718,941 462,169	483,146 439,300	4,799 0	0	226,804 20,409	0	1,836 528	0	418 5	1,938 1,927		
Education, & Extension Service Economic Research Service Food Safety Inspection Service	219,400 5,563 125	10,621 5,563 125	4,798 0 0	0 0 0	202,372 0 0	0 0 0	1,206 0 0	0 0 0	403 0 0	0 0 0		
Foreign Agricultural Service	924 29,700 1,060	721 25,756 1,060	0 1 0	0 0 0	203 3,820 0	0 0 0	0 102 0	0 0 0	0 10 0	0 11 0		
Department of Commerce, total	44,780 531 40,335 3,914	40,259 531 36,279 3,449	491 0 491 0	0 0 0 0	3,792 0 3,545 247	20 0 20 0	118 0 0 118	0 0 0 0	100 0 0 100	0 0 0 0		
Department of Defense, total	1,115,141 209,528 189,515 375,832 340,266	354,956 89,200 102,390 130,816 32,550	122,919 24,990 29,222 37,240 31,467	426 0 88 258 80	597,316 92,738 55,166 180,136 269,276	5,318 0 82 1,250 3,986	23,152 0 2,220 19,303 1,629	563 0 7 0 556	0 0 0 0	10,491 2,600 340 6,829 722		
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	62,609 277,657	5,094 27,456	28,317 3,150	0 80	23,605 245,671	3,736 250	1,179 450	556 0	0	122 600		
Department of Education	2,010	95	0	0	1,915	0	0	0	0	0		
Department of Energy	2,285,784	66,032	114,715	225,030	475,533	1,265,563	23,549	112,344	2,500	518		
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	8,588,895 1,157 8,587,738	1,385,270 1,157 1,384,113	384,461 0 384,461	111,144 0 111,144	0	22,089 0 22,089	1,298,133 0 1,298,133	12,614 0 12,614	68,274 0 68,274	27,397 0 27,397		
Department of the Interior, total Geological Survey National Park Service	51,906 51,356 550	48,503 48,463 40	0 0 0	0 0 0	3,220 2,832 388	0 0 0	122 0 122	0 0 0	61 61 0	0 0 0		
Department of Justice, total	15,200 15,200	1 1	4,087 4,087	0	5,360 5,360	0 0	4,636 4,636	0	1,116 1,116	0 0		
Department of Labor, total	11,100 11,100	11,100 11,100	0 0	0	0	0 0	0	0	0	0 0		
Department of Transportation, total Federal Highway Administration	67,623 67,623	26,131 26,131	25,795 25,795	1,240 1,240	5,408 5,408	0 0	5,210 5,210	0 0	3,839 3,839	0 0		
Department of the Treasury, totalBureau of Engraving & Printing	28 28	28 28	0 0	0	0 0	0 0	0	0	0	0 0		
Department of Veterans Affairs	137,500	137,500	0	0	0	0	0	0	0	0		

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-29. Preliminary Federal obligations for basic research, by agency and performer: fiscal year 2000

### [Dollars in thousands]

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									ıα	ye 2 01 2
						Extrami	ural			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Environmental Protection AgencyInternat'l Development Cooperation	78,800	22,080	15,982	0	25,495	0	12,125	0	2,692	426
Agency, total	99 99 2,448,845 2,513,787 129,000	13 13 612,938 19,147 129,000	0 0 717,419 48,961 0	0 0 1,005 0 0	8 8 495,494 2,107,024 0	0 0 511,376 165,016 0	76 76 96,482 158,291 0	0 0 3,254 237 0	0 0 4,553 4,201 0	2 2 6,324 10,910 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-30. Federal obligations for basic research, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

### [Dollars in thousands]

Field of science and engineering	1998	Preliminary				
riola di colonica and ongricolaring	.000	1999	2000			
Total, all fields	15,613,012	17,366,858	18,209,43			
Life sciences, total	7,853,424	8,990,397	9,182,92			
Biological (excluding environmental)	3,652,992	NA	0,102,02 N			
Environmental biology	196,843	NA	N.			
Agricultural	372,509	NA	N			
Medical	3,392,433	NA	N			
Life sciences, n.e.c.	238,647	NA	N			
Psychology, total	312,016	357,361	376,67			
Biological aspects	27,321	NA	N			
Social aspects	12,862	NA	N			
Psychological sciences, n.e.c.	271,833	NA	N			
Physical sciences, total	2,941,381	3,198,021	3,418,45			
Astronomy	706,921	NA	N			
Chemistry	517,523	NA	N			
Physics	1,579,807	NA	N			
Physical sciences, n.e.c.	137,130	NA	N			
Environmental sciences, total	1,528,734	1,641,667	1,795,2			
Atmospheric	655,184	NA	N			
Geological	391,170	NA	N			
Oceanography	285,997	NA	Ņ			
Environmental sciences, n.e.c.	196,383	NA	١			
Mathematics & computer sciences, total	705,486	754,671	839,54			
Mathematics	250,725	NA	1			
Computer sciences	419,128	NA	Ņ			
Mathematics & computer sciences, n.e.c	35,633	NA	١			
Engineering, total	1,594,442	1,653,457	1,803,3			
Aeronautical	285,233	NA	ļ			
Astronautical	67,952	NA	1			
Chemical	52,266 35,854	NA NA	N			
Electrical	·	NA	١			
ElectricalMechanical	213,922 106,670	NA NA	,			
Metallurgy & materials	478,243	NA	, ,			
Engineering, n.e.c.	354,302	NA	1			
Social sciences, total	224,799	249,105	252,64			
Anthropology	13,522	NA NA	202,0			
Economics	41,510	NA	N			
Political science	4,624	NA	N			
Sociology	23,463	NA	N			
Social sciences, n.e.c.	141,680	NA	N			
Other sciences, n.e.c.	452,730	522,179	540,59			

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

 Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)
 Not elsewhere classified KEY: NA

n.e.c.

# Table C-31. Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

Department of Agriculture, total									•	age 1 01 2
Department of Agriculture, total	Agency and subdivision	Total				mental	matics and computer			sciences,
Department of Agriculture, total	Total, all agencies	15,613,012	7,853,424	312,016	2,941,381	1,528,734	705,486	1,594,442	224,799	452,730
Agricultural Research Service	Departments:									
Education, & Extension Service   163,451   144,820   0   5,946   522   0   3,707   8,456   0   6   6   6   6   6   6   6   6	Agricultural Research Service									230 0
Forest Service	Education, & Extension Service Economic Research Service	7,155	0	0	0	0	0	0	7,155	0 0 0
Bureau of the Census	Forest Service	29,300	20,695	40	1,990	652	480	3,988	1,225	0 230 0
Department of the Air Force   185,564   19,165   0   44,276   0   24,204   95,422   0   2,497	Bureau of the Census Nat'l Inst of Standards & Tech	550 38,636	0 4,447	104 0	0 29,089	0 518	446 1,253	0 3,329	0	0 0 0 0
Washington Headquarfers Svcs         256,086         42,789         1,768         37,575         13,749         29,363         130,842         0         0           Department of Education         2,063         0         0         0         0         0         0         0         2,063         0           Department of Energy         2,028,805         192,810         0         1,229,268         225,585         120,490         259,207         0         1,445           Dept of Health & Human Svcs, total         7,355,363         6,386,178         1,050         0	Department of the Air Force Department of the Army Department of the Navy	185,564 181,955 328,975	19,165 26,957 25,001	4,634 18,751	44,276 31,716 46,054	0 14,814 108,558	24,204 34,699 29,935	95,422 65,634 100,676	0 0 0	5,998 2,497 3,501 0
Department of Energy         2,028,805         192,810         0         1,229,268         225,585         120,490         259,207         0         1,445           Dept of Health & Human Svcs, total         7,355,363         6,386,178         273,675         116,480         22,487         66,191         106,444         68,180         315,728           Health Resources & Services Admin         1,050         1,050         0										0 0
Dept of Health & Human Svcs, total         7,355,363         6,386,178         273,675         116,480         22,487         66,191         106,444         68,180         315,728           Health Resources & Services Admin         1,050         1,050         0	Department of Education	2,063	0	0	0	0	0	0	2,063	0
Health Resources & Services Admin	Department of Energy	2,028,805	192,810	0	1,229,268	225,585	120,490	259,207	0	1,445
Geological Survey         48,187         9,415         0         0         38,772         0 <t< td=""><td>Health Resources &amp; Services Admin</td><td>1,050</td><td>1,050</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>315,728 0 315,728</td></t<>	Health Resources & Services Admin	1,050	1,050	0	0	0	0	0	0	315,728 0 315,728
Office of Justice Programs         16,000         0 <t< td=""><td>Geological Survey</td><td>48,187</td><td>9,415</td><td>Ö</td><td>0</td><td>38,772</td><td>0</td><td>0</td><td>0</td><td>0 0 0</td></t<>	Geological Survey	48,187	9,415	Ö	0	38,772	0	0	0	0 0 0
Bureau of Labor Statistics       11,100       0       0       0       0       0       0       0       11,100       0         Department of Transportation, total       34,971       0       64       161       174       1,437       33,123       0       12         Federal Highway Administration       34,971       0       64       161       174       1,437       33,123       0       12         Department of the Treasury, total       34       0       0       34       0       0       0       0       0       0				- 1	-	-		-		0 0
Federal Highway Administration     34,971     0     64     161     174     1,437     33,123     0     12       Department of the Treasury, total     34     0     0     34     0     0     0     0     0										0 0
										12 12
Bureau of Engraving & Printing	Department of the Treasury, total Bureau of Engraving & Printing	34 34	0 0	0 0	34 34	0 0	0	0 0	0 0	0
Department of Veterans Affairs	Department of Veterans Affairs	120,015	114,516	3,302	0	0	0	2,197	0	0

## Table C-31. Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Environmental Protection AgencyInternat'l Development Cooperation	57,400	15,869	0	0	24,564	0	16,967	0	0
Agency, total	1,815 1,815	0	0 0	0 0	0	0	0	0 0	1,815 1,815
National Aeronautics & Space Admin National Science Foundation	2,023,793 2,118,677	94,073 351,533	3,801 5,877	873,384 452,653	639,119 432,541	22,326 353,957	368,194 343,074	387 75,229	22,509 103,813
Smithsonian Institution Tennessee Valley Authority	120,000 48	39,968 48	0 0	39,453 0	4,395 0	0	0	35,004 0	1,180 0

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

n.e.c. = Not elsewhere classified

NOTE:

KEY:

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Table C-32. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1999

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Agency and subdivision									Г	age 1 01 2
Department of Agriculture, total	Agency and subdivision	Total				mental	matics and computer			Other sciences, n.e.c.
Department of Agriculture, total	Total, all agencies	17,366,858	8,990,397	357,361	3,198,021	1,641,667	754,671	1,653,457	249,105	522,179
Agricultural Research Service   Cooperative State Research,   Education, & Extension Service   227,657   204,156   0   7,414   597   0   4,947   10,543   Economic Research Service   6,497   0   0   0   0   0   0   0   0   0	Departments:									
Education, & Extension Service	Agricultural Research Service									235 0
Forest Service	Education, & Extension Service Economic Research Service	6,497	0	0	0	0	0	0	6,497	0 0 0
Bureau of the Census	Forest Service	29,700	20,980	40	2,015	660	485	4,035	1,250	0 235 0
Department of the Air Force   195,251   20,537   0   40,361   3,000   32,024   96,486   0   2,000   17,8913   29,518   29,518   3,675   28,100   13,463   29,662   57,297   0   17,000   17,000   17,000   10,614   40,590   0   0   0   0   0   0   0   0   0	Bureau of the Census Nat'l Inst of Standards & Tech	1,049 40,765	0 4,693	198 0	0 30,691	0 547	851 1,322	0 3,512	0	0 0 0 0
Washington Headquarters Svcs       255,140       52,787       8,404       29,169       17,422       25,727       121,631       0         Department of Education       2,050       0       0       0       0       0       0       0       2,050         Department of Energy       2,230,019       208,224       0       1,373,146       238,766       132,773       276,200       0         Dept of Health & Human Svcs, total       8,428,388       7,317,802       313,603       133,474       25,768       75,848       121,974       78,127       361,         Health Resources & Services Admin       1,102       1,102       0	Department of the Air Force	195,251 178,913 344,564	20,537 29,518 26,563	0 3,675 16,710	40,361 28,100 66,736	3,000 13,463 108,666	32,024 29,662 30,457	96,486 57,297 95,432	0 0	20,041 2,843 17,198 0
Department of Energy						-				0 0
Dept of Health & Human Svcs, total	Department of Education	2,050	0	0	0	0	0	0	2,050	0
Health Resources & Services Admin       1,102       1,102       0       361,         Department of the Interior, total	Department of Energy	2,230,019	208,224	0	1,373,146	238,766	132,773	276,200	0	910
Geological Survey	Health Resources & Services Admin	1,102	1,102	0	0	0	0	0	0	361,792 0 361,792
	Geological Survey	50,279	10,790	Ö	0	39,489	0	0	0	0 0 0
Department of Justice, total         20,075         0         0         0         0         0         0         0         20,075           Office of Justice Programs         20,075         0 <td< td=""><td></td><td></td><td></td><td>- 1</td><td>-</td><td>-</td><td></td><td></td><td></td><td>0 0</td></td<>				- 1	-	-				0 0
Department of Labor, total										0
Department of Transportation, total       39,897       0       427       1,165       998       167       37,118       0         Federal Highway Administration       39,897       0       427       1,165       998       167       37,118       0										22 22
Department of the Treasury, total						-				0
Department of Veterans Affairs	Department of Veterans Affairs	139,855	134,237	3,847	0	0	0	1,771	0	0

# Table C-32. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 1999

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Environmental Protection AgencyInternat'l Development Cooperation	75,663	15,767	0	0	35,423	0	24,473	0	0
Agency, total	60	0	0	0	0	0	0	0	60
Agcy for Internat'l Development <sup>1</sup>	60	0	0	0	0	0	0	0	60
National Aeronautics & Space Admin	2,122,562	98,667	3,987	916,037	670,331	23,416		407	23,608
National Science Foundation	2,332,659	387,037	6,470	498,369	476,227	389,706	377,723		114,300
Smithsonian Institution	122,000	40,135	0	40,004	4,421	0	0	36,229	1,211

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

Table C-33. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 2000

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									9
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	18,209,439	9,182,929	376,673	3,418,455	1,795,219	839,548	1,803,372	252,648	540,595
Departments:									
Department of Agriculture, total	718,941 462,169	642,235 423,635	40 0	41,034 31,600	3,303 2,086	2,119 574	13,288 4,274	16,687 0	235 0
Education, & Extension Service Economic Research Service Food Safety Inspection Service	219,400 5,563 125	196,571 0 125	0 0 0	7,419 0 0	557 0 0	0 0 0	4,979 0 0	9,874 5,563 0	0 0 0
Foreign Agricultural Service Forest Service Nat'l Agricultural Statistics Svc	924 29,700 1,060	924 20,980 0	0 40 0	2,015 0	0 660 0	0 485 1,060	4,035 0	0 1,250 0	0 235 0
Department of Commerce, total Bureau of the Census Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	44,780 531 40,335 3,914	4,643 0 4,643 0	100 100 0 0	30,368 0 30,368 0	4,455 0 541 3,914	1,739 431 1,308 0	3,475 0 3,475 0	0 0 0 0	0 0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,115,141 209,528 189,515 375,832 340,266	139,213 21,696 30,848 28,976 57,693	40,865 0 4,659 18,228 17,978	181,272 49,301 29,617 72,799 29,555	153,237 3,661 12,542 118,537 18,497	140,177 27,945 33,832 33,224 45,176	441,863 104,119 62,309 104,068 171,367	0 0 0 0	18,514 2,806 15,708 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	62,609 277,657	2,921 54,772	0 17,978	0 29,555	0 18,497	18,504 26,672	41,184 130,183	0 0	0 0
Department of Education	2,010	0	0	0	0	0	0	2,010	0
Department of Energy	2,285,784	201,156	0	1,394,067	241,450	170,960	277,151	0	1,000
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	8,588,895 1,157 8,587,738	7,457,164 1,157 7,456,007	319,574 0 319,574	136,015 0 136,015	26,259 0 26,259	77,292 0 77,292	124,296 0 124,296	79,615 0 79,615	368,680 0 368,680
Department of the Interior, total Geological Survey National Park Service	51,906 51,356 550	11,378 11,378 0	0 0 0	550 0 550	39,978 39,978 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Justice, total Office of Justice Programs	15,200 15,200	0 0	0 0	0 0	0 0	0 0	0 0	15,200 15,200	0 0
Department of Labor, total	11,100 11,100	0 0	0 0	0 0	0 0	0 0	0 0	11,100 11,100	0 0
Department of Transportation, total Federal Highway Administration	67,623 67,623	0	723 723	1,975 1,975	1,691 1,691	283 283	62,571 62,571	0 0	380 380
Department of the Treasury, total	28 28	0	0 0	28 28	0 0	0	0 0	0 0	0 0
Department of Veterans Affairs	137,500	132,000	3,800	0	0	0	1,700	0	0

## Table C-33. Preliminary Federal obligations for basic research, by agency and field of science and engineering: fiscal year 2000

### [Dollars in thousands]

Page 2 of 2

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and computer sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Environmental Protection AgencyInternat'l Development Cooperation	78,800	21,798	0	0	33,712	0	23,290	0	0
Agency, total	99	0	0	0	0	0	0	0	99
Agcy for Internat'l Development <sup>1</sup>	99	0	0	0	0	0	0	0	99
National Aeronautics & Space Admin	2,448,845	113,817	4,599	1,053,777	773,255	27,012	448,685	468	27,232
National Science Foundation	2,513,787	417,090	6,972	537,067	513,206	419,966	407,053	89,258	123,175
Smithsonian Institution	129,000	42,435	0	42,302	4,673	0	0	38,310	1,280
			l l		1	I	I	I	1

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-34. Federal obligations for basic research in psychology and life sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

		Psyc	chology				Life sc	iences		
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Biological	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	312,016	27,321	12,862	271,833	7,853,424	3,652,992	196,843	372,509	3,392,433	238,647
Departments:										
Department of Agriculture, total	40 0	0 0	40 0	0	528,885 362,321	75,124 30,979	68,012 29,517	371,894 293,769	13,855 8,056	0
Education, & Extension Service Food Safety Inspection Service Foreign Agricultural Service Forest Service	0 0 0 40	0 0 0 0	0 0 0 40	0 0 0 0	144,820 125 924 20,695	38,275 125 0 5,745	25,525 0 0 12,970	76,761 0 924 440	4,259 0 0 1,540	0 0 0 0
Department of Commerce, total Bureau of the Census Nat'l Inst of Standards & Tech	104 104 0	0 0 0	0 0 0	104 104 0	4,447 0 4,447	4,447 0 4,447	0 0 0	0 0 0	0 0 0	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	25,153 0 4,634 18,751 1,768	18,874 0 0 17,106 1,768	2,304 0 2,304 0 0	3,975 0 2,330 1,645 0	115,682 19,165 26,957 25,001 44,559	36,728 9,798 4,028 9,869 13,033	8,300 0 0 7,895 405	0 0 0 0	67,516 9,367 19,791 7,237 31,121	3,138 0 3,138 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	0 1,768	0 1,768	0 0	0	1,770 42,789	1,770 11,263	0 405	0 0	0 31,121	0
Department of Energy	0	0	0	0	192,810	186,819	1,500	0	0	4,491
Dept of Health & Human Svcs, total Health Resources & Services Admin National Institutes of Health	0	8,382 0 8,382	4,130 0 4,130	261,163 0 261,163	1,050	2,985,873 0 2,985,873	57 0 57	0 0 0	3,185,712 1,050 3,184,662	214,536 0 214,536
Department of the Interior, total	0	0 0	0 0	0	9,415 9,415	4,990 4,990	4,425 4,425	0 0	0	0
Department of Transportation, total Federal Highway Administration	64 64	0 0	64 64	0	0	0 0	0 0	0 0	0	0
Department of Veterans Affairs	3,302	0	0	3,302	114,516	0	0	0	114,516	0
Other agencies:										
Environmental Protection Agency	0 3,801 5,877 0	0 65 0 0	0 447 5,877 0 0	3,289 0 0 0	15,869 94,073 351,533 39,968 48	0 64,190 276,084 18,689 48	12,859 4,962 75,449 21,279 0	0 615 0 0	3,010 7,824 0 0	0 16,482 0 0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-35. Federal obligations for basic research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

	Physical sciences Environmental sciences  Physical Physic							ciences		
Agency and subdivision	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	2,941,381	706,921	517,523	1,579,807	137,130	1,528,734	655,184	391,170	285,997	196,383
Departments:										
Department of Agriculture, total	40,692 32,756	0	38,804 31,178	1,888 1,578	0 0	3,051 1,877	2,911 1,834	140 43	0	0
Education, & Extension Service Forest Service	5,946 1,990	0 0	5,946 1,680	0 310	0 0	522 652	522 555	0 97	0 0	0 0
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	29,089 29,089 0	371 371 0	9,668 9,668 0	18,918 18,918 0	132 132 0	925 518 407	0 0 0	518 518 0	0 0 0	407 0 407
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total Washington Headquarters Svcs	159,621 44,276 31,716 46,054 37,575 37,575	6,270 0 0 0 6,270 6,270	68,396 22,000 10,284 25,001 11,111 11,111	73,778 22,276 18,150 13,158 20,194 20,194	11,177 0 3,282 7,895 0	137,121 0 14,814 108,558 13,749 13,749	4,394	8,386 0 2,455 4,934 997 997	57,045 0 0 48,687 8,358 8,358	47,850 0 7,388 40,462 0
Department of Energy	1,229,268	0	137,786	1,089,581	1,901	225,585	90,544	84,298	4,004	46,739
Dept of Health & Human Svcs, total National Institutes of Health	116,480 116,480	0	103,405 103,405	13,075 13,075	0 0	22,487 22,487	0	0 0	0 0	22,487 22,487
Department of the Interior, total	546 0 546	0 0 0	0 0 0	0 0 0	546 0 546	38,772 38,772 0	0 0 0	38,772 38,772 0	0 0 0	0 0 0
Department of Transportation, total Federal Highway Administration	161 161	0	0	5 5	156 156	174 174	0	0 0	0	174 174
Department of the Treasury, totalBureau of Engraving & Printing	34 34	0	30 30	4 4	0 0	0	0	0 0	0	0
Other agencies:										
Environmental Protection Agency	0 873,384 452,653 39,453	0 549,878 113,234 37,168	0 39,854 118,920 660	0 256,396 124,537 1,625	0 27,256 95,962 0	24,564 639,119 432,541 4,395	391,555	1,599 158,872 94,560 4,025	0 37,810 186,851 287	11,510 50,882 16,334 0

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-36. Federal obligations for basic research in engineering, by agency and detailed field of engineering: fiscal year 1998

### [Dollars in thousands]

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	1,594,442	285,233	67,952	52,266	35,854	213,922	106,670	478,243	354,302
Departments:									
Department of Agriculture, total	11,812 4,117	0 0	0	2,682 2,112	972 680	399 393	485 255	0 0	7,274 677
Education, & Extension Service Forest Service	3,707 3,988	0 0	0	0 570	0 292	0 6	0 230	0 0	3,707 2,890
Department of Commerce, totalNat'l Inst of Standards & Tech	3,329 3,329	0 0	0	1,019 1,019	126 126	233 233	454 454	1,377 1,377	120 120
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	450,095 95,422 65,634 100,676 188,363	21,494 9,951 9,272 0 2,271	4,843 3,968 0 0 875	9,786 0 1,971 0 7,815	8,541 0 7,141 0 1,400	167,575 22,573 21,999 36,201 86,802	72,885 18,826 8,945 22,369 22,745	110,146 10,539 10,995 23,684 64,928	54,825 29,565 5,311 18,422 1,527
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	57,521 130,842	0 2,271	0 875	0 7,815	0 1,400	33,257 53,545	0 22,745	24,264 40,664	0 1,527
Department of Energy	259,207	0	0	4,605	0	0	16,782	230,547	7,273
Dept of Health & Human Svcs, total	106,444 106,444	0 0	0	0 0	0	0	0 0	0 0	106,444 106,444
Department of Transportation, total Federal Highway Administration	33,123 33,123	0 0	0	3 3	2,867 2,867	0 0	0 0	18,885 18,885	11,368 11,368
Department of Veterans Affairs	2,197	0	0	0	0	0	0	0	2,197
Other agencies:									
Environmental Protection Agency National Aeronautics & Space Admin National Science Foundation	16,967 368,194 343,074	0 263,739 0	63,109 0	374 2,341 31,456	0 90 23,258	0 5,918 39,797	0 8,907 7,157	0 14,737 102,551	16,593 9,353 138,855

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

Table C-37. Federal obligations for basic research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

	Mathematics and computer sciences Social sciences									
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	705,486	250,725	419,128	35,633	224,799	13,522	41,510	4,624	23,463	141,680
Departments:										
Department of Agriculture, total	2,217 640	2,217 640	0 0	0	16,836 0	35 0	14,489 0	0 0	2,312 0	0 0
Education, & Extension Service  Economic Research Service  Forest Service  Nat'l Agricultural Statistics Svc	0 0 480 1,097	0 0 480 1,097	0 0 0 0	0 0 0 0	8,456 7,155 1,225 0	0 0 35 0	6,269 7,155 1,065 0	0 0 0 0	2,187 0 125 0	0 0 0 0
Department of Commerce, total	1,699 446 1,253	0 0 0	1,253 0 1,253	446 446 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	137,169 24,204 34,699 29,935 48,331	26,882 0 5,016 13,816 8,050	84,957 1,415 28,657 16,119 38,766	25,330 22,789 1,026 0 1,515	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	18,968 29,363	0 8,050	18,968 19,798	0 1,515	0 0	0 0	0	0	0	0
Department of Education	0	0	0	0	2,063	0	0	0	0	2,063
Department of Energy	120,490	93,586	21,674	5,230	0	0	0	0	0	0
Dept of Health & Human Svcs, total National Institutes of Health	66,191 66,191	30,833 30,833	35,358 35,358	0 0	68,180 68,180	0 0	0	0 0	168 168	68,012 68,012
Department of Justice, total Office of Justice Programs	0 0	0 0	0 0	0	16,000 16,000	0 0	0	0	16,000 16,000	0
Department of Labor, total	0 0	0 0	0 0	0 0	11,100 11,100	0 0	11,100 11,100	0	0	0
Department of Transportation, total Federal Highway Administration	1,437 1,437	17 17	1,362 1,362	58 58	0 0	0	0	0	0	0 0
Other agencies:										
National Aeronautics & Space Admin National Science Foundation Smithsonian Institution	22,326 353,957 0	1,135 96,055 0	16,622 257,902 0	4,569 0 0	387 75,229 35,004	0 10,813 2,674	0 15,921 0	0 4,624 0	250 4,361 372	137 39,510 31,958

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

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									. ";	ge 1 of 3
						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	. 15,309,257	5,046,947	3,515,393	517,729	3,788,857	1,100,674	1,027,684	92,640	155,204	64,129
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Cooperative State Research,	. 4,018	475,681 3,714 271,314	7,060 0 0	0 0 0	234,406 274 14,492	0 0 0	9,476 0 1,018	0 0 0	1,423 30 4	2,096 0 1,191
Education, & Extension Service Economic Research Service		11,347 55,922	5,123 1,900	0 0	200,516 4,961	0	5,175 467	0 0	833 311	0 831
Foreign Agricultural Service Forest Service Grain Inspection Packers &		250 129,354	0 37	0 0	248 11,790	0 0	0 1,500	0 0	0 245	0 74
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	. 2,236	549 2,015 1,216	0 0 0	0 0 0	0 205 1,920	0 0 0	0 16 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	. 4,616 . 557 . 266,740	590,017 4,616 50 175,285 406,300	78,755 0 19 74,810 3,926	0 0 0 0	95,521 0 288 15,835 79,398	2 0 0 2 0	2,685 0 200 611 1,874	0 0 0 0	223 0 0 0 223	197 0 0 197 0
Information Administration	. 3,766	3,766	0	0	0	0	0	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	. 551,315 . 635,886 . 493,183	1,098,395 308,887 367,496 213,902 208,110	1,247,657 212,033 195,253 198,240 642,131	11,649 275 174 2,032 9,168	418,212 17,245 50,915 68,196 281,856	72,953 104 449 2,196 70,204	61,239 9,854 18,295 5,273 27,817	13,614 2,715 638 1,968 8,293	0 0 0 0	15,333 202 2,666 1,376 11,089
Ballistic Missile Defense Org	. 778,009 1,094	24,783 61,854 1,094 7,171	83,050 399,476 0 0	100 5,121 0 0	7,081 232,367 0 0	9,536 38,824 0 0	541 26,858 0 0	7,123 0 845	0 0 0 0	1,710 6,386 0 0
Agency <sup>2</sup>	. 205,073	61,136	130,687	3,940	2,414	3,985	0	125	0	2,786
Special Operations Command Washington Headquarters Svcs		4,755 47,317	9,578 19,340	0 7	1,363 38,631	0 17,859	0 418	0 200	0 0	0 207
Department of Education	146,679	6,851	5,158	0	101,285	0	32,383	0	1,002	0
Department of Energy	. 1,758,706	136,110	154,599	438,088	114,471	833,594	21,710	59,979	155	0

Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

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Agency and subdivision										Pag	ge 2 of 3
Dept of Health & Human Svcs, total   4,663,111   1,174,521   332,571   49,946   2,366,224   9,167   630,495   632,000   0,20							Extramu	ıral			
Dept of Health & Human Sucs, total   4,683,111   1,74,521   332,571   49,946   2,386,224   9,167   630,495   8,529   7,314   14,345   34,000   1,000   1,000   3,000						United St	ates and ter	ritories			
Administration on Aging	Agency and subdivision	Total		trial	admin by in- dustrial	sities and	admin by univs and	nonprofit insti-	admin by non- profit insti-	and local	Foreign
Prevention	Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch	2,435 23,456	185 948	0 2,080	0	0 9,874	0	250 8,621	0	2,000 1,895	0 38
Health Care Financing Admin		343,559	239,825	33,336	0	61,368	0	3,260	0	5,770	0
Planning & Urban Development   13,948   4,538   1,261   0   2,899   0   2,240   0   3,010   0	Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total	51,236 11,875 3,934,867	353 1,910 779,499	38,190 0 201,318	0 0 49,946	5,329 7,529 2,248,050	0 0 9,167	6,006 2,436 581,420	0 0 8,528	1,089 0 43,480	269 0 13,459
Department of the Interior, total		13,948	4,538	1,261	0	2,899	0	2,240	0	3,010	0
Bureau of Reclamation	Dept of Housing & Urban Development	9,211	6,263	913	0	478	0	1,557	0	0	0
Bureau of Prisons	Bureau of Reclamation	6,626 389,011 29,286	5,557 362,117 6,614	0 1,930 7,505	0 0 0	656 18,215 13,578	0 0 0	173 0 282	0 0 0	240 6,749 242	0 0 1,065
Bureau of Labor Statistics	Bureau of Prisons	4,326	2,500	0	0	0	0	, O	0	1,826	0
Pension & Welfare Benefits Admin         2,740         460         1,213         0         43         0         1,024         0         0         0           Department of State3         852         324         513         0         0         15         0         6,368         0         67,521         0         0         0         1,404         0         0	Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin	1,300 2,197 4,592	1,300 47 1,697	0	0 0 0	2,100 0	0 0 0	0 50 0	0 0 0	0 0 0	0 0 0
Department of Transportation, total   366,075   96,084   160,888   3,520   22,058   57   9,154   6,231   67,521   562   562   562   563	Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin										
Coast Guard         5,110         3,285         1,325         500         0 <td>Department of State<sup>3</sup></td> <td>852</td> <td>324</td> <td>513</td> <td>0</td> <td>0</td> <td>15</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Department of State <sup>3</sup>	852	324	513	0	0	15	0	0	0	0
National Highway Traffic Safety       41,621       26,637       10,199       0       4,048       0       307       0       0       430         Research & Special Programs Admin       4,569       2,937       1,326       0       104       57       75       70       0       0         Department of the Treasury, total       52,519       38,712       13,807       0	Coast Guard Federal Aviation Administration Federal Highway Administration	5,110 151,550 134,634	3,285 31,506 21,959	1,325 107,989 30,104	500 2,228 792	0 3,666 7,890	0 0 0	0 0 6,368	0 6,161 0	0 0 67,521	0 0 0
Administration         41,621         26,637         10,199         0         4,048         0         307         0         0         430           Research & Special Programs Admin         4,569         2,937         1,326         0         104         57         75         70         0         0           Department of the Treasury, total         52,519         38,712         13,807         0	Federal Transit Administration	7,400	400	0	0	6,000	0	1,000	0	0	0
Bureau of Engraving & Printing       2,642       2,642       0	Administration										
Department of Veterans Affairs	Bureau of Engraving & Printing	2,642 47,942 684 776	2,642 35,053 684 50	0 12,889 0 726	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
	Department of Veterans Affairs	149,051	149,051	0	0	0	0	0	0	0	0

### Table C-38. Federal obligations for applied research, by agency and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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									. "	90000
						Extramo	ural			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	680 419,800 3,025 1,144 171,108	15 229,834 3,025 1,144 18,822	200 54,870 0 0 10,266	0 0 0 0	400 87,528 0 0 11,978	0 0 0 0	65 36,916 0 0 109,509	0 0 0	9,243 0 0	1,409 0 0
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	171,108 455 2,389,858 120 170,660	18,822 455 597,779 120 814	10,266 0 1,358,785 0 60,156	0 0 462 0 0	11,978 0 152,006 0 99,012	0 0 174,382 0 0	109,509 0 94,190 0 10,611	2,555 0	0 0 3,200 0 56	
Nuclear Regulatory Commission Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy <sup>3</sup> United States Information Agency US International Trade Commission	51,700 17,422 761 1,200 258 7,165	14,301 2,336 761 525 258 7,165	3,486 2,415 0 675 0	14,064 0 0 0 0 0	5,180 5,317 0 0 0	10,504 0 0 0 0 0	353 1,544 0 0 0 0	0 0 0 0	5,810 0 0 0 0	

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency

<sup>&</sup>lt;sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-39. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 1999

### [Dollars in thousands]

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						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	16,454,828	5,332,631	3,614,493	559,507	4,260,086	1,155,167	1,128,380	100,663	240,543	63,358
Departments:										
Department of Agriculture, total	800,701 4,000 308,174	490,909 4,000 289,112	8,097 0 0	0 0 0	290,409 0 16,847	0 0 0	8,990 0 991	0 0 0	1,002 0 4	1,294 0 1,220
Education, & Extension Service Economic Research Service	278,532 58,469	13,115 49,400	8,060 0	0 0	251,475 9,069	0 0	5,129 0	0 0	753 0	0
Foreign Agricultural Service Forest Service Grain Inspection Packers &	498 144,800	250 131,154	0 37	0 0	248 11,790	0 0	0 1,500	0	0 245	0 74
Stockyards Administration	549 2,161 3,518	549 1,911 1,418	0 0 0	0 0 0	0 180 800	0 0 0	0 70 1,300	0 0 0	0 0 0	0 0 0
Department of Commerce, total	836,286 8,805 550 289,600 533,448	639,295 8,805 50 181,737 444,820	103,785 0 300 99,417 4,068	0 0 0 0	90,651 0 0 7,636 83,015	84 0 0 2 82	2,108 0 200 611 1,297	0 0 0 0	166 0 0 0 166	197 0 0 197 0
Information Administration	3,883	3,883	0	0	0	0	0	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	3,111,671 557,335 699,293 551,006 1,304,037	1,120,843 308,225 375,327 234,573 202,718	1,326,975 214,399 213,599 222,925 676,052	17,648 2,092 4,206 2,056 9,294	477,909 16,187 82,037 79,776 299,909	69,753 575 247 3,370 65,561	70,204 12,938 20,961 5,275 31,030	13,802 2,342 330 1,557 9,573	1,982 0 1,982 0	577
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency	115,170 880,155 2,389 8,151	21,559 69,975 2,389 6,761	87,756 451,925 0 0	5,793 0 0	4,304 262,875 0 0	1,451 43,921 0 0	100 30,384 0 0	0 8,058 0 1,390	0 0 0 0	0
Defense Threat Reduction Agency <sup>2</sup>	183,996	54,831	117,264	3,501	2,208	3,491	0	125	0	2,576
Special Operations Command	18,657 95,519	5,653 41,550	12,107 7,000	0	897 29,625	0 16,698	0 546	0	0	0 100
Department of Education	151,867	7,729	6,053	0	103,899	0	33,104	0	1,082	0
Department of Energy	1,900,115	184,345	156,306	464,253	117,312	883,297	27,802	66,800	0	0

# Table C-39. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 1999

### [Dollars in thousands]

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									Pa	ge 2 of 3
						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	5,268,696 1,160 18,789 160,923	1,287,494 185 1,219 60,800	361,109 0 1,775 46,940	58,083 0 0	2,740,911 600 9,549 33,957	10,660 0 0	722,258 375 5,379 18,976	9,918 0 0 0	61,731 0 827 0	16,532 0 40 250
Prevention	382,559	272,825	39,336	0	61,368	0	3,260	0	5,770	0
Food & Drug Administration	141,229 50,000 11,855 4,488,181 14,000	117,459 60 1,591 829,355 4,000	4,000 32,940 0 234,118 2,000	0 0 0 58,083 0	14,000 7,000 7,755 2,603,682 3,000	0 0 0 10,660 0	5,400 8,210 2,509 676,149 2,000	0 0 0 9,918 0	70 1,500 0 50,564 3,000	300 290 0 15,652 0
Planning & Evaluation	14,000	4,000	2,000	0	3,000	0	2,000	0	3,000	0
Dept of Housing & Urban Development	21,313	11,493	3,038	0	1,596	0	5,186	0	0	0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	483,145 6,050 418,845 29,056 29,194	418,305 5,017 389,488 7,211 16,589	11,149 0 1,930 7,518 1,701	0 0 0 0	44,389 783 20,678 12,180 10,748	0 0 0 0	556 150 0 250 156	0 0 0 0	7,071 100 6,749 222 0	1,675 0 0 1,675
Department of Justice, total Bureau of Prisons Office of Justice Programs	29,443 3,950 25,493	3,850 2,500 1,350	9,444 0 9,444	0 0 0	7,835 0 7,835	0 0 0	6,789 0 6,789	0 0 0	1,525 1,450 75	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hith Admin Office of the Secretary	10,267 1,300 2,000 5,010 100	3,682 1,300 50 1,741 30	4,565 0 0 3,269 0	0 0 0 0	1,970 0 1,900 0 70	0 0 0 0	50 0 50 0	0 0 0 0	0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	57 1,800	57 504	0 1,296	0 0	0	0 0	0	0 0	0 0	0 0
Department of State <sup>3</sup>	964	327	622	0	0	15	0	0	0	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	450,645 4,491 150,000 210,725 25,113	113,592 3,000 37,125 24,476 12,609	148,390 1,091 97,912 24,752 10,233	3,600 400 2,250 950 0	21,100 0 6,490 6,530 1,845	240 0 0 0 0	8,557 0 0 5,782 218	6,223 0 6,223 0	148,235 0 0 148,235 0	708 0 0 0 208
Federal Transit Administration	4,100	600	300	0	1,200	0	2,000	0	0	0
AdministrationResearch & Special Programs Admin	50,350 5,866	32,224 3,558	12,084 2,018	0	5,035 0	0 240	507 50	0	0 0	500 0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	60,665 2,198 55,496 766 1,679 526	39,247 2,198 35,845 766 75 363	21,418 0 19,651 0 1,604 163	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Department of Veterans Affairs	171,294	171,294	0	0	0	0	0	0	0	0
					·					

# Table C-39. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 1999

#### [Dollars in thousands]

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						Extramı	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Other agencies:										
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Internat'l Development Cooperation	738 387,200 4,178 1,097	1 211,122 4,178 1,097	225 50,609 0 0	0 0 0	400 80,731 0 0	0 0 0 0	112 34,049 0 0	0 0 0 0	0 8,525 0 0	0
Agency, total	163,160	17,946	9,790	0	11,421	0	104,424	0	0	19,579
Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	163,160 595 2,310,555 120 180,233	17,946 595 577,964 120 858	9,790 0 1,293,611 0 63,531	0 0 476 0 0	11,421 0 152,006 0 104,567	0 0 183,374 0 0	104,424 0 91,068 0 11,206	0 0 2,468 0 11	0 0 3,196 0 60	19,579 0 6,392 0
Nuclear Regulatory Commission Social Security Administration US Arms Control & Disarmament Agcy <sup>3</sup> United States Information Agency US International Trade Commission	49,201 53,656 50 100 6,873	14,467 4,855 50 100 6,873	3,213 32,563 0 0 0	15,447 0 0 0 0	4,272 8,708 0 0	7,744 0 0 0 0	355 1,562 0 0	1,441 0 0 0 0	5,968 0 0 0	2,262 0 0 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

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**KEY:** FFRDCs = Federally funded research and development centers

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# Table C-40. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 2000

### [Dollars in thousands]

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						Extramu	ıral			
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	16,470,143	5,439,527	3,270,012	608,818	4,194,937	1,403,388	1,137,893	93,779	257,782	64,007
Departments:										
Department of Agriculture, total	755,277 4,268 316,671	499,961 4,268 301,002	6,488 0 0	0 0 0	241,545 0 13,984	0 0 0	5,131 0 361	0 0 0	758 0 4	1,394 0 1,320
Education, & Extension Service Economic Research Service	231,632 50,065	14,169 45,025	6,451 0	0 0	209,303 5,040	0 0	1,200 0	0 0	509 0	0 0
Foreign Agricultural Service	498 144,800	250 131,154	0 37	0 0	248 11,790	0 0	0 1,500	0	0 245	0 74
Grain Inspection Packers & Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	682 2,161 4,500	682 1,911 1,500	0 0 0	0 0 0	0 180 1,000	0 0 0	0 70 2,000	0 0 0	0 0 0	0 0 0
Department of Commerce, total  Bureau of the Census  Economic Development Admin  Nat'l Inst of Standards & Tech  Nat'l Oceanic & Atmospheric Admin  National Telecommunications &	814,958 4,460 550 299,272 504,482	626,475 4,460 50 185,052 430,719	109,464 0 300 105,217 3,947	0 0 0 0	77,048 0 0 7,916 69,132	2 0 0 2 0	1,586 0 200 888 498	0 0 0 0	186 0 0 0 186	197 0 0 197 0
Information Administration	6,194	6,194	0	0	0	0	0	0	0	0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	3,001,119 513,837 582,300 526,418 1,378,564	1,084,107 284,470 359,848 229,089 210,700	1,301,575 212,682 176,516 209,731 702,646	17,380 300 4,604 2,278 10,198	434,703 13,359 28,527 74,206 318,611	86,846 590 210 2,412 83,634	51,233 1,171 11,182 5,567 33,313	11,479 861 248 1,504 8,866	0 0 0 0	13,796 404 1,165 1,631 10,596
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction	74,831 954,772 1,966 8,261	11,013 75,907 1,966 8,261	58,817 490,239 0 0	0 6,284 0 0	3,810 285,161 0 0	1,191 47,644 0 0	32,960 0 0	0 8,741 0 0	0 0 0 0	7,836 0 0
Agency <sup>2</sup>	204,689	61,083	130,587	3,914	2,456	3,864	0	125	0	2,660
Special Operations Command	17,269 116,776	5,232 47,238	11,203 11,800	0 0	834 26,350	0 30,935	0 353	0	0	0 100
Department of Education	170,886	12,920	5,987	0	113,405	0	37,480	0	1,094	0
Department of Energy	2,087,458	244,992	114,968	513,559	99,490	1,033,763	19,199	61,487	0	0

# Table C-40. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 2000

## [Dollars in thousands]

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						Extramu	ıral		Pa	ge 2 of 3
					United St	ates and ter	ritories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	5,511,350 1,085 28,049 197,255	1,431,076 185 1,074 85,849	378,267 0 2,728 52,243	59,458 0 0 0	2,801,984 500 14,671 37,793	10,913 0 0 0	739,335 400 8,264 21,120	10,152 0 0 0	63,551 0 1,270 0	16,614 0 42 250
Prevention	468,559	357,052	41,109	0	61,368	0	3,260	0	5,770	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary,	151,745 55,000 11,924 4,583,733 14,000	126,245 70 1,660 854,941 4,000	4,300 36,230 0 239,657 2,000	0 0 0 59,458 0	15,000 7,700 7,755 2,654,197 3,000	0 0 0 10,913 0	5,800 9,350 2,509 686,632 2,000	0 0 0 10,152 0	100 1,650 0 51,761 3,000	300 0 0 16,022 0
Planning & Evaluation	14,000	4,000	2,000	0	3,000	0	2,000	0	3,000	0
Dept of Housing & Urban Development	18,054	12,277	1,787	0	939	0	3,051	0	0	0
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	500,152 7,436 432,871 28,565 31,280	435,265 6,365 403,428 7,329 18,143	11,587 0 2,016 7,618 1,953	0 0 0 0	44,450 821 20,678 11,923 11,028	0 0 0 0	556 150 0 250 156	0 0 0 0	7,069 100 6,749 220 0	1,225 0 0 1,225 0
Department of Justice, total Bureau of Prisons Office of Justice Programs	9,841 4,000 5,841	2,501 2,500 1	2,080 0 2,080	0 0 0	1,925 0 1,925	0 0 0	1,835 0 1,835	0 0 0	1,500 1,500 0	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & HIth Admin Office of the Secretary	11,041 1,300 1,331 5,255 100	4,028 1,300 51 1,817 30	5,663 0 0 3,438 0	0 0 0 0	1,270 0 1,200 0 70	0 0 0 0	80 0 80 0	0 0 0 0	0 0 0 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 3,000	55 775	0 2,225	0 0	0 0	0 0	0	0	0 0	0 0
Department of State <sup>3</sup>	964	327	622	0	0	15	0	0	0	0
Department of Transportation, total  Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration Federal Railroad Administration	607,936 5,667 173,000 338,401 23,601	141,426 3,237 46,219 38,220 12,815	199,224 2,130 109,573 63,022 8,537	3,680 300 2,588 792 0	22,269 0 7,464 6,072 1,662	74 0 0 0 0	65,559 0 0 62,484 400	7,156 0 7,156 0	167,811 0 0 167,811 0	737 0 0 0 187
Federal Transit Administration	4,100	500	400	0	1,200	0	2,000	0	0	0
AdministrationResearch & Special Programs Admin	58,713 4,454	37,576 2,859	14,091 1,471	0 0	5,871 0	0 74	625 50	0	0 0	550 0
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service Department of Veterans Affairs	74,817 2,286 70,217 855 900 559	39,829 2,286 36,199 855 100 389	34,988 0 34,018 0 800 170	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
25partificition votorano/mano	100,000	100,000	U	ı o					0	

# Table C-40. Preliminary Federal obligations for applied research, by agency and performer: fiscal year 2000

#### [Dollars in thousands]

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			Extramural										
					United S	ates and ter	ritories						
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by in- dustrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign			
Other agencies:													
Appalachian Regional Commission	750 1,168 368,100 2,747 1,379	1 168 200,830 2,747 1,379	200 1,000 48,113 0 0	0 0 0 0	399 0 76,749 0 0	0 0 0 0	150 0 32,370 0 0	0 0 0 0	0 0 8,105 0 0	0 0 1,933 0 0			
Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	143,474 143,474 614 1,943,166 120	17,073 17,073 614 486,123 120	8,521 8,521 0 950,106 0	0 0 0 478 0	9,942 9,942 0 152,006	0 0 0 263,614 0	90,895 90,895 0 76,521	0 0 0 1,880	0 0 0 3,450 0	17,043 17,043 0 8,988			
National Science Foundation Nuclear Regulatory Commission Social Security Administration United States Information Agency US International Trade Commission	184,539 46,594 36,895 100 7,144	879 14,251 3,414 100 7,144	65,049 2,260 22,063 0	0 14,263 0 0 0	107,065 3,625 6,123 0 0	8,161 0 0 0	11,474 340 1,098 0	11 1,614 0 0 0	61 0 4,197 0 0	0 2,080 0 0			

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-41. Federal obligations for applied research, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

### [Dollars in thousands]

Field of science and engineering	1998	Prelin	ninary
ů ů		1999	2000
Total, all fields	15,309,257	16,454,828	16,470,143
Life sciences, total Biological (excluding environmental) Environmental biology Agricultural Medical Life sciences, n.e.c.	5,704,150	6,394,974	6,378,808
	2,053,580	NA	NA
	407,640	NA	NA
	390,276	NA	NA
	2,603,892	NA	NA
	248,762	NA	NA
Psychology, total Biological aspects Social aspects Psychological sciences, n.e.c.	278,952	304,320	309,438
	14,271	NA	NA
	84,628	NA	NA
	180,053	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	1,268,298	1,258,473	1,300,886
	25,229	NA	NA
	301,507	NA	NA
	551,951	NA	NA
	389,611	NA	NA
Environmental sciences, total  Atmospheric  Geological  Oceanography  Environmental sciences, n.e.c.	1,533,245	1,529,462	1,413,740
	519,242	NA	NA
	212,146	NA	NA
	273,797	NA	NA
	528,060	NA	NA
Mathematics & computer sciences, total  Mathematics  Computer sciences  Mathematics & computer sciences, n.e.c.	1,131,356	1,253,345	1,291,535
	83,338	NA	NA
	979,612	NA	NA
	68,406	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	4,300,981	4,438,115	4,415,224
	1,311,194	NA	NA
	563,159	NA	NA
	137,881	NA	NA
	208,272	NA	NA
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	425,427	NA	NA
	142,881	NA	NA
	310,855	NA	NA
	1,201,312	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	581,330	645,398	637,284
	4,664	NA	NA
	188,940	NA	NA
	15,600	NA	NA
	77,368	NA	NA
	294,758	NA	NA
Other sciences, n.e.c.	510,945	630,741	723,228

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

n.e.c. = Not elsewhere classified KEY:

# Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

## [Dollars in thousands]

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								r	Page 1 of 3
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	15,309,257	5,704,150	278,952	1,268,298	1,533,245	1,131,356	4,300,981	581,330	510,945
Departments:									
Department of Agriculture, total	. 4,018	508,674 4,018 247,055	370 0 0	46,646 0 32,048	7,304 0 1,674	12,851 0 340	45,523 0 6,902	105,549 0 0	3,225 0 0
Education, & Extension Service Economic Research Service		172,464 0	0	9,283 0	505 0	0	13,361 0	27,381 64,392	0
Foreign Agricultural Service		498 82,790	0 370	0 5,315	0 5,125	0 10,275	0 25,260	0 10,640	0 3,225
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	. 2,236	0	0 0 0	0 0 0	0 0 0	2,236 0	0 0 0	0 0 3,136	0 0 0
Department of Commerce, total  Bureau of the Census  Economic Development Admin  Nat'l Inst of Standards & Tech  Nat'l Oceanic & Atmospheric Admin  National Telecommunications &	4,616 557 266,740	0 0 19,433	402 402 0 0	75,399 0 0 52,183 23,216	249,895 0 0 249 249,646	76,404 2,907 0 53,691 19,806	155,147 0 0 141,184 10,197	21,448 1,307 557 0 19,584	42,584 0 0 0 42,584
Information Administration	. 3,766	0	0	0	0	0	3,766	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	551,315 635,886 493,183	23,404 131,037 27,084	48,916 21,725 9,174 8,923 9,094	280,665 88,803 32,175 2,136 157,551	224,179 5,474 60,508 141,338 16,859	521,511 32,015 45,433 10,617 433,446	1,355,443 366,320 268,033 303,085 418,005	176 0 176 0 0	185,302 13,574 89,350 0 82,378
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction	. 778,009 1,094	0	0 0 0 8,016	37,975 44,552 0 0	2,701 6,313 0 0	30,344 389,007 0	55,781 263,771 0 0	0 0 0 0	0 14,745 1,094 0
Agency <sup>1</sup>	. 205,073	4,307	0	59,266	6,767	9,638	58,856	0	66,239
Special Operations Command Washington Headquarters Svcs			0 1,078	0 15,758	0 1,078	0 4,457	14,794 24,803	0	300 0
Department of Education	146,679	11,169	7,319	0	0	1,156	7,704	119,331	0
Department of Energy	. 1,758,706	62,995	0	639,325	124,425	374,127	538,684	0	19,150
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hith Care Policy & Rsch Centers for Disease Control &	2,435 23,456	0	148,619 0 0 2,193	62,323 0 0 0	12,031 0 0 0	47,787 0 0 12,372	56,953 0 0 0	118,846 2,435 23,456 42,528	208,556 0 0 39,629
Prevention	343,559	343,559	0	0	0	0	0	0	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary,	51,236 11,875 3,934,867	11,875 3,416,313	0 0 0 146,426 0	0 0 0 62,323 0	0 0 0 12,031 0	0 0 0 35,415 0	0 0 0 56,953 0	0 0 0 36,479 13,948	0 0 0 168,927 0
Planning & Evaluation	. 13,948	0	0	0	0	0	0	13,948	0
Dept of Housing & Urban Development	. 9,211	0	0	0	0	123	571	8,313	204

# Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

## [Dollars in thousands]

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									J
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	454,119 6,626 389,011 29,286 29,196	106,997 0 101,394 0 5,603	0 0 0 0	1,007 0 0 90 917	309,703 2,650 281,241 20,371 5,441	6,874 0 4,126 1,155 1,593	8,653 3,876 1,125 3,652 0	20,885 100 1,125 4,018 15,642	0 0 0 0 0
Department of Justice, total  Bureau of Prisons  Office of Justice Programs	26,005 4,326 21,679	0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	7,000 0 7,000	18,005 3,326 14,679	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	10,979 1,300 2,197 4,592 95	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	95 0 0 95	0 0 0 0	10,884 1,300 2,197 4,592 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 2,740	0 0	0 0	0	0	0 0	0	55 2,740	0 0
Department of State <sup>2</sup>	852	0	0	0	0	0	0	852	0
Department of Transportation, total  Coast Guard  Federal Aviation Administration  Federal Highway Administration Federal Railroad Administration	366,075 5,110 151,550 134,634 21,191	8,738 0 4,499 493 0	25,700 647 24,430 623 0	37,428 0 35,551 1,877 0	23,787 551 20,183 2,978 0	22,805 1,133 0 15,249 1,925	211,588 2,779 49,595 100,539 19,266	8,602 0 0 2,775 0	27,427 0 17,292 10,100 0
Federal Transit Administration National Highway Traffic Safety	7,400	0	0	0	0	0	7,400	0	0
Administration	41,621 4,569	3,746 0	0 0	0	0 75	4,162 336	27,886 4,123	5,827 0	0 35
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	52,519 2,642 47,942 684 776 475	0 0 0 0 0	475 0 0 0 0 475	2,642 2,642 0 0 0	776 0 0 0 776 0	0 0 0 0 0	0 0 0 0 0	48,626 0 47,942 684 0 0	0 0 0 0 0
Department of Veterans Affairs	149,051	99,562	29,714	0	0	0	19,775	0	0

# Table C-42. Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1998

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	680 419,800 3,025 1,144 171,108	,	0 0 0 0	0 0 0 0	0 179,651 0 0 3,246	0 0 180 0	0 124,097 1,400 0	680 0 1,445 1,144 62,032	0 0 0 0
Agcy for Internat'l Development <sup>3</sup> Library of Congress  National Aeronautics & Space Admin  National Archives & Records Admin  National Science Foundation	171,108 455 2,389,858 120 170,660	105,830 0 191,784 0 15,312	0 0 16,919 0 18	0 455 106,082 120 15,267	3,246 0 393,295 0 4,327	0 0 57,816 0 9,127	0 0 1,615,868 0 100,557	62,032 0 0 0 9,799	0 0 8,094 0 16,253
Nuclear Regulatory Commission Social Security Administration Tennessee Valley Authority US Arms Control & Disarmament Agcy <sup>2</sup> United States Information Agency US International Trade Commission	51,700 17,422 761 1,200 258 7,165	0 0 0 60 0	0 0 0 0 0	0 0 561 378 0 0	0 200 426 0 0	0 0 0 0 0 0	51,700 0 0 60 258 0	0 17,422 0 126 0 7,165	0 0 0 150 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	16,454,828	6,394,974	304,320	1,258,473	1,529,462	1,253,345	4,438,115	645,398	630,741
Departments:									
Department of Agriculture, total	800,701 4,000 308,174	576,674 4,000 268,574	375 0 0	46,316 0 30,098	7,627 0 1,906	12,888 0 327	49,787 0 7,269	103,769 0 0	3,265 0 0
Education, & Extension Service Economic Research Service	278,532 58,469	217,923 0	0	10,833 0	531 0	0 0	16,938 0	32,307 58,469	0 0
Foreign Agricultural Service	498 144,800	498 83,830	0 375	0 5,385	0 5,190	0 10,400	0 25,580	0 10,775	0 3,265
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	549 2,161 3,518	549 0 1,300	0 0 0	0 0 0	0 0 0	2,161 0	0 0 0	0 0 2,218	0 0 0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	836,286 8,805 550 289,600 533,448	161,352 0 0 21,098 140,254	766 766 0 0	82,018 0 0 56,655 25,363	262,432 0 0 270 262,162	86,379 5,547 0 58,292 22,540	169,379 0 0 153,285 12,211	25,137 2,492 550 0 22,095	48,823 0 0 0 48,823
Information Administration	3,883	0	0	0	0	0	3,883	0	0
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	3,111,671 557,335 699,293 551,006 1,304,037	384,228 21,165 169,072 30,958 163,033	46,159 19,696 8,102 10,210 8,151	247,902 82,321 30,918 2,444 132,219	240,643 7,120 73,331 153,828 6,364	528,889 27,709 44,400 12,737 444,043	1,425,213 340,564 263,038 340,829 480,782	14,494 14,362 132 0 0	224,143 44,398 110,300 0 69,445
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction	115,170 880,155 2,389 8,151	90,882 0 0	0 0 0 8,151	39,485 28,744 0 0	292 0 0 0	21,423 412,822 0 0	52,820 341,571 0 0	0 0 0 0	1,150 6,136 2,389 0
Agency <sup>1</sup>	183,996	3,864	0	53,175	6,072	8,648	52,807	0	59,430
Special Operations Command Washington Headquarters Svcs	18,657 95,519	815 67,472	0 0	0 10,815	0	0 1,150	17,502 16,082	0	340 0
Department of Education	151,867	11,758	7,705	0	0	1,217	8,110	123,077	0
Department of Energy	1,900,115	79,616	0	639,038	96,076	490,103	574,450	0	20,832
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	5,268,696 1,160 18,789 160,923	4,520,303 0 0 37,952	169,013 0 0 1,997	71,087 0 0 0	13,723 0 0 0	51,381 0 0 10,986	64,962 0 0 0	114,508 1,160 18,789 38,950	263,719 0 0 71,038
Prevention	382,559	382,559	0	0	0	0	0	0	0
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,	141,229 50,000 11,855 4,488,181 14,000	141,229 50,000 11,855 3,896,708 0	0 0 0 167,016 0	0 0 0 71,087 0	0 0 0 13,723 0	0 0 0 40,395 0	0 0 0 64,962 0	0 0 0 41,609 14,000	0 0 0 192,681 0
Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0
Dept of Housing & Urban Development	21,313	0	0	0	0	278	1,321	19,239	475

# Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	483,145 6,050 418,845 29,056 29,194	121,626 0 116,023 0 5,603	0 0 0 0	1,643 0 0 634 1,009	324,032 2,420 296,446 19,801 5,365	6,796 0 4,126 1,093 1,577	9,395 3,530 1,125 4,740 0	19,653 100 1,125 2,788 15,640	0 0 0 0
Department of Justice, total	29,443 3,950 25,493	0 0 0	500 500 0	0 0 0	Ö	500 500 0	0 0 0	14,043 2,950 11,093	14,400 0 14,400
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & HIth Admin Office of the Secretary	10,267 1,300 2,000 5,010 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	100 0 0 0 100	0 0 0 0	10,167 1,300 2,000 5,010	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	57 1,800	0 0	0 0	0	0	0 0	0	57 1,800	0 0
Department of State <sup>2</sup>	964	0	0	0	0	0	0	964	0
Department of Transportation, total  Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	450,645 4,491 150,000 210,725 25,113	9,772 0 4,065 1,177 0	28,276 713 26,282 1,281 0	48,777 0 44,408 4,369 0	30,542 680 21,303 8,459 0	9,141 1,039 0 594 1,630	285,867 2,059 37,158 178,635 23,483	8,177 0 0 3,170	30,093 0 16,784 13,040 0
Federal Transit AdministrationNational Highway Traffic Safety	4,100	0	0	0	0	0	4,100	0	0
Administration	50,350 5,866	4,530 0	0 0	0	0 100	5,539 339	35,274 5,158	5,007 0	0 269
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	60,665 2,198 55,496 766 1,679 526	0 0 0 0 0	526 0 0 0 0 526	2,238 2,198 0 0 40 0	1,639 0 0 0 1,639	0 0 0 0 0	0 0 0 0 0	56,262 0 55,496 766 0	0 0 0 0 0
Department of Veterans Affairs	171,294	120,729	34,624	0	0	0	15,941	0	0

# Table C-43. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 1999

### [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total  Agcy for Internat'l Development <sup>3</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin National Science Foundation	738 387,200 4,178 1,097 163,160 163,160 595 2,310,555 120 180,233	0 107,041 0 0 100,277 100,277 0 185,427 0 16,171	0 0 0 0 0 0 16,358 0 18	0 0 0 0 0 595 102,566 120 16,123	0 165,704 0 0 2,216 2,216 0 380,258 0 4,570	0 0 134 0 0 0 0 55,900 0 9,639	0 114,455 1,516 0 0 0 0 1,562,221 0 106,197		0 0 0 0 0 0 7,825 0 17,166
Nuclear Regulatory Commission	49,201 53,656 50 100 6,873	0 0 0 0	0 0 0 0	0 0 50 0	0 0 0 0	0 0 0 0	49,201 0 0 100 0	0 53,656 0 0 6,873	0 0 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 2000

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									age i oi o
Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	16,470,143	6,378,808	309,438	1,300,886	1,413,740	1,291,535	4,415,224	637,284	723,228
Departments:									
Department of Agriculture, total	755,277 4,268 316,671	545,079 4,268 275,979	375 0 0	46,100 0 30,928	7,583 0 1,959	12,897 0 336	48,827 0 7,469	91,151 0 0	3,265 0 0
Education, & Extension Service Economic Research Service	231,632 50,065	177,822 0	0 0	9,787 0	434 0	0 0	15,778 0	27,811 50,065	0
Foreign Agricultural Service Forest Service Grain Inspection Packers &	498 144,800	498 83,830	0 375	0 5,385	0 5,190	0 10,400	0 25,580	0 10,775	0 3,265
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	682 2,161 4,500	682 0 2,000	0 0 0	0 0 0	0 0 0	2,161 0	0 0 0	0 0 2,500	0 0 0
Department of Commerce, total  Bureau of the Census  Economic Development Admin  Nat'l Inst of Standards & Tech  Nat'l Oceanic & Atmospheric Admin  National Telecommunications &	814,958 4,460 550 299,272 504,482	145,432 0 0 21,803 123,629	388 388 0 0	83,045 0 0 58,547 24,498	262,718 0 0 279 262,439	83,103 2,810 0 60,239 20,054	176,239 0 0 158,404 11,641	21,253 1,262 550 0 19,441	42,780 0 0 0 42,780
Information Administration	6,194	0	0	0	0	0	6,194	0	0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	3,001,119 513,837 582,300 526,418 1,378,564	295,045 20,833 63,122 29,819 181,271	49,210 19,519 10,377 9,835 9,479	228,372 69,982 30,472 2,354 125,564	197,392 6,998 34,224 148,169 8,001	485,454 34,161 49,382 12,268 389,643	1,443,876 348,347 294,124 323,973 477,432	1,693 1,500 193 0	300,077 12,497 100,406 0 187,174
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction	74,831 954,772 1,966 8,261	0 103,751 0 0	0 0 0 8,261	21,248 31,260 0 0	28 0 0 0	6,241 368,695 0	47,287 332,315 0 0	0 0 0 0	27 118,751 1,966 0
Agency <sup>1</sup>	204,689	4,298	0	59,155	6,755	9,620	58,746	0	66,115
Special Operations Command Washington Headquarters Svcs	17,269 116,776	640 72,582	0 1,218	0 13,901	0 1,218	0 5,087	16,314 22,770	0	315 0
Department of Education	170,886	11,857	8,209	0	0	4,104	9,121	137,595	0
Department of Energy	2,087,458	50,407	0	713,325	85,736	577,519	641,698	0	18,773
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for HIth Care Policy & Rsch Centers for Disease Control &	5,511,350 1,085 28,049 197,255	4,709,136 0 0 42,239	172,795 0 0 2,223	72,600 0 0 0	14,015 0 0 0	53,482 0 0 12,227	66,345 0 0 0	128,979 1,085 28,049 43,351	293,998 0 0 97,215
Prevention	468,559	468,559	0	0	0	0	0	0	0
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary,	151,745 55,000 11,924 4,583,733 14,000	151,745 55,000 11,924 3,979,669 0	0 0 0 170,572 0	0 0 0 72,600 0	0 0 0 14,015 0	0 0 0 41,255 0	0 0 0 66,345 0	0 0 0 42,494 14,000	0 0 0 196,783 0
Planning & Evaluation	14,000	0	0	0	0	0	0	14,000	0
Dept of Housing & Urban Development	18,054	0	0	0	0	235	1,119	16,298	402

# Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 2000

## [Dollars in thousands]

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Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	500,152 7,436 432,871 28,565 31,280	132,590 0 126,987 0 5,603	0 0 0 0	1,070 0 0 61 1,009	327,491 2,974 299,221 19,931 5,365	6,988 0 4,311 1,100 1,577	10,104 4,262 1,176 4,666 0	21,909 200 1,176 2,807 17,726	0 0 0 0 0
Department of Justice, total Bureau of Prisons Office of Justice Programs		0 0 0	500 500 0	0 0 0	0 0 0	500 500 0	0 0 0	8,841 3,000 5,841	0 0 0
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hith Admin Office of the Secretary	11,041 1,300 1,331 5,255 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	100 0 0 0 100	0 0 0 0	10,941 1,300 1,331 5,255 0	0 0 0 0
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 3,000	0 0	0 0	0	0	0 0	0	55 3,000	0
Department of State <sup>2</sup>	964	0	0	0	0	0	0	964	0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	607,936 5,667 173,000 338,401 23,601	12,004 0 4,829 1,890 0	29,424 986 26,380 2,058 0	49,977 0 42,961 7,016 0	33,983 691 19,608 13,584 0	10,188 1,554 0 953 1,000	421,621 2,436 60,532 286,869 22,601	10,962 0 0 5,091	39,777 0 18,690 20,940 0
Federal Transit Administration National Highway Traffic Safety	4,100	0	0	0	0	0	4,100	0	0
Administration	58,713 4,454	5,285 0	0 0	0	0 100	6,458 223	41,099 3,984	5,871 0	0 147
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service		0 0 0 0 0	559 0 0 0 0 559	2,886 2,286 0 0 600 0	300 0 0 0 300 0	0 0 0 0 0	0 0 0 0 0	71,072 0 70,217 855 0	0 0 0 0 0
Department of Veterans Affairs	169,500	120,000	34,200	0	0	0	15,300	0	0

# Table C-44. Preliminary Federal obligations for applied research, by agency and field of science and engineering: fiscal year 2000

### [Dollars in thousands]

Page 3 of 3

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Other agencies:									
Appalachian Regional Commission	750 1,168 368,100 2,747 1,379	0 101,761 0	0 0 0 0	0 0 0 0	0 0 157,530 0 0	0 0 0 78 0	0 1,168 108,809 1,824 0	750 0 0 845 1,379	0 0 0 0
Internat'l Development Cooperation Agency, total	143,474 143,474 614 1,943,166 120	82,978 0	0 0 0 13,759 0	0 0 614 86,268 120		0 0 0 47,017 0	0 0 0 1,313,745 0	58,017 58,017 0 0	0 0 0 6,581 0
National Science Foundation Nuclear Regulatory Commission Social Security Administration United States Information Agency US International Trade Commission	36,895	0 0 0	19 0 0 0	16,509 0 0 0 0	4,679 0 0 0 0	9,870 0 0 0 0	108,734 46,594 0 100	10,596 0 36,895 0 7,144	17,575 0 0 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

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<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-45. Federal obligations for applied research in psychology and life sciences, by agency and detailed field of science: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

		Psyc	hology				Life sc	iences		
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	278,952	14,271	84,628	180,053	5,704,150	2,053,580	407,640	390,276	2,603,892	248,762
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Cooperative State Research, Education, & Extension Service	370 0 0	0 0 0	370 0 0	0 0 0	508,674 4,018 247,055 172,464	53,719 0 8,481 29,418	156,477 0 42,203 51,634	288,033 4,018 193,143 87,160	10,445 0 3,228 4,252	0 0 0
Foreign Agricultural Service	0	0	0	0	498	0	0	498	0	0
Forest Service Grain Inspection Packers & Stockyards Administration Rural Business-Cooperative Svc	370 0 0	0	370 0 0	0 0	82,790 549 1,300	15,820 0 0	62,640 0 0	1,365 549 1,300	2,965 0 0	0 0
Department of Commerce, total Bureau of the Census	402 402 0 0	0 0 0 0	0 0 0 0	402 402 0 0	146,121 0 19,433 126,688	31,044 0 9,585 21,459	75,544 0 0 75,544	24,503 0 1,089 23,414	11,312 0 5,901 5,411	3,718 0 2,858 860
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	48,916 21,725 9,174 8,923 9,094	9,787 325 0 8,923 539	36,199 18,470 9,174 0 8,555	2,930 2,930 0 0 0	322,860 23,404 131,037 27,084 141,335	100,600 2,643 2,223 0 95,734	9,154 9,154 0 0 0	539 0 0 0 539	187,449 0 128,814 14,175 44,460	25,118 11,607 0 12,909 602
Defense Adv Rsch Projects Agcy Defense Logistics Agency Defense Threat Reduction	0 8,016	0	0 8,016	0 0	59,621 0	49,070 0	0 0	0 0	10,551 0	0
Agency <sup>1</sup>	0 0 1,078	0 0 539	0 0 539	0 0 0	4,307 602 76,805	3,144 0 43,520	0 0 0	0 0 539	1,163 0 32,746	602
Department of Education	7,319	0	4,237	3,082	11,169	0	0	0	2,310	8,859
Department of Energy	0	0	0	0	62,995	2,300	7,000	0	53,695	0
Dept of Health & Human Svcs, total	148,619 2,193	4,484 0	2,488 279	141,647 1,914	4,007,996 42,076	1,740,506 0	30 0	0 0	2,098,809 39,447	168,651 2,629
Prevention Food & Drug Administration Health Care Financing Admin	0 0 0	0 0 0	0 0 0	0 0 0	343,559 142,937 51,236	0 142,937 0	0 0 0	0 0 0	343,559 0 0	0 0 51,236
Health Resources & Services Admin National Institutes of Health	0 146,426	0 4,484	0 2,209	0 139,733	11,875 3,416,313	0 1,597,569	0 30	0 0	11,875 1,703,928	0 114,786
Department of the Interior, total Geological Survey Mational Park Service	0 0 0	0 0 0	0 0 0	0 0 0	106,997 101,394 5,603	56,903 53,073 3,830	49,598 48,133 1,465	496 188 308	0 0 0	0 0 0
Department of Justice, total	500 500	0	300 300	200 200	0 0	0 0	0 0	0 0	0	0
Department of Transportation, total	25,700 647 24,430 623	0 0 0 0	25,700 647 24,430 623	0 0 0 0	8,738 0 4,499 493	0 0 0 0	473 0 0 473	20 0 0 20	4,499 0 4,499 0	3,746 0 0 0
Administration	0	0	0	0	3,746	0	0	0	0	3,746
Department of the Treasury, total	475 475	0	0	475 475	0 0	0 0	0	0 0	0	0
	29,714	l ol	0	29,714	99,562	0	0	0	99,562	0

# Table C-45. Federal obligations for applied research in psychology and life sciences, by agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

Page 2 of 2

		Life sciences								
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Other agencies:										
Environmental Protection AgencyInternat'l Development Cooperation	0	0	0	0	116,052	0	94,041	0	22,011	0
Agency, total Agcy for Internat'l Development <sup>2</sup> National Aeronautics & Space Admin National Science Foundation US Arms Control & Disarmament Agcy <sup>3</sup>	0 0 16,919 18 0	0 0 0 0	0 0 15,316 18 0	0 0 1,603 0 0	105,830 105,830 191,784 15,312 60	0 0 62,627 5,881 0	0 0 5,892 9,431 0	76,685 76,685 0 0		29,145 29,145 9,465 0 60

- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.
- 3 Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-46. Federal obligations for applied research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1998

# [Dollars in thousands]

Page 1 of 2

		Phys	ical sciend	ces			Enviror	nmental s	ciences	
Agency and subdivision	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	1,268,298	25,229	301,507	551,951	389,611	1,533,245	519,242	212,146	273,797	528,060
Departments:										
Department of Agriculture, total	46,646 32,048	0	43,406 30,248	3,240 1,800	0 0	7,304 1,674	6,026 1,606	1,278 68	0 0	0 0
Education, & Extension Service Forest Service	9,283 5,315	0 0	9,283 3,875	0 1,440	0 0	505 5,125	505 3,915	0 1,210	0 0	0
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	75,399 52,183 23,216	0 0 0	31,901 19,217 12,684	43,295 32,763 10,532	203 203 0	249,895 249 249,646	0	249	126,409 0 126,409	14,125 0 14,125
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	280,665 88,803 32,175 2,136 157,551	0 0 0 0	55,936 12,478 7,720 0 35,738	164,598 76,244 11,541 2,136 74,677	60,131 81 12,914 0 47,136	224,179 5,474 60,508 141,338 16,859	28,023 3,352 9,651 11,960 3,060	2,856 1,455 1,401 0	55,414 0 0 48,742 6,672	137,886 667 49,456 80,636 7,127
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	37,975 44,552	0	20,519 0	17,456 28,826	0 15,726	2,701 6,313	2,701 0	0	0 6,313	0
Agency <sup>1</sup> Washington Headquarters Svcs	59,266 15,758	0	0 15,219	27,856 539	31,410 0	6,767 1,078	0 359	0	0 359	6,767 360
Department of Energy	639,325	0	99,002	232,069	308,254	124,425	0	0	240	124,185
Dept of Health & Human Svcs, total National Institutes of Health	62,323 62,323	0 0	55,327 55,327	6,996 6,996	0 0	12,031 12,031	0 0	0 0	0 0	12,031 12,031
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	1,007 0 0 90 917	0 0 0 0	917 0 0 0 917	90 0 0 90	0 0 0 0	309,703 2,650 281,241 20,371 5,441	3,445 0 0 1,092 2,353	162,215 0 160,845 1,010 360	17,491 0 0 17,128 363	126,552 2,650 120,396 1,141 2,365
Department of Transportation, total	37,428 0 35,551 1,877 0	0 0 0 0	0 0 0 0	35,810 0 35,551 259 0	1,618 0 0 1,618 0	23,787 551 20,183 2,978 75	21,314 0 20,183 1,131 0	0 0 0 0	551 551 0 0	1,922 0 0 1,847 75
Department of the Treasury, total  Bureau of Engraving & Printing  United States Customs Service	2,642 2,642 0	0 0 0	213 213 0	21 21 0	2,408 2,408 0	776 0 776	0 0 0	0 0 0	0 0 0	776 0 776

# Table C-46. Federal obligations for applied research in physical and environmental sciences, by agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

Page 2 of 2

		Phys	ical sciend	ces		Environmental sciences					
Agency and subdivision	Total	Astronomy	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.	
Other agencies:											
Environmental Protection AgencyInternat'l Development Cooperation	0	0	0	0	0	179,651	83,775	11,688	0	84,188	
Agency, totalAgcy for Internat'l Development <sup>2</sup>	0	0	0	0	0 0	3,246 3,246	0	0	0	3,246 3,246	
Library of Congress  National Aeronautics & Space Admin	455 106,082	0 25,215	364 8,471	0 60,937	91 11,459	0 393,295	0 271,291	0 26,661	72,627	22,716	
National Archives & Records Admin  National Science Foundation  Tennessee Valley Authority  US Arms Control & Disarmament Agcy <sup>3</sup>	120 15,267 561 378	0 14 0 0	70 5,099 561 240	50 4,839 0 6	0 5,315 0 132	0 4,327 200 426	0 62 125 0	0 2,842 0 426	0 1,065 0 0	0 358 75 0	

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

<sup>&</sup>lt;sup>3</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

# Table C-47. Federal obligations for applied research in engineering, by agency and detailed field of engineering: fiscal year 1998

# [Dollars in thousands]

Page 1 of 2

									1 ago 1 01 2
Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metallurgy and materials	Engi- neering, n.e.c.
Total, all agencies	4,300,981	1,311,194	563,159	137,881	208,272	425,427	142,881	310,855	1,201,312
Departments:									
Department of Agriculture, total	45,523 6,902	0	0	5,387 3,792	4,773 1,018	236 176	2,920 420	0	32,207 1,496
Education, & Extension Service Forest Service	13,361 25,260	0	0	0 1,595	0 3,755	0 60	2,500	0 0	13,361 17,350
Department of Commerce, total	155,147 141,184 10,197	0 0 0	0 0 0	5,794 5,794 0	23,003 23,003 0	41,333 31,904 5,663	3,188 3,188 0	36,082 36,082 0	45,747 41,213 4,534
Information Administration	3,766	0	0	0	0	3,766	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,355,443 366,320 268,033 303,085 418,005	287,129 189,302 23,445 33,855 40,527	31,800 29,902 904 0 994	25,012 1,824 11,255 4,746 7,187	43,330 9,700 26,578 0 7,052	339,663 66,806 98,062 104,549 70,246	106,266 15,863 54,746 25,817 9,840	230,409 46,714 16,872 41,237 125,586	291,834 6,209 36,171 92,881 156,573
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	55,781 263,771	1,575 38,717	994 0	3,570 1,929	0 361	13,826 16,319	0 89	13,515 112,071	22,301 94,285
Agency <sup>1</sup> Special Operations Command Washington Headquarters Svcs	58,856 14,794 24,803	235 0 0	0 0 0	883 0 805	5,886 0 805	23,013 0 17,088	8,946 0 805	0 0 0	19,893 14,794 5,300
Department of Education	7,704	0	0	0	0	0	0	0	7,704
Department of Energy	538,684	0	0	86,720	37,979	25,230	717	30,071	357,967
Dept of Health & Human Svcs, total	56,953 56,953	0 0	0	0 0	0	0	0	0 0	56,953 56,953
Dept of Housing & Urban Development	571	0	0	0	0	0	0	0	571
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service	8,653 3,876 1,125 3,652	0 0 0	0 0 0	3,094 1,300 0 1,794	4,468 2,250 938 1,280	187 0 187 0	0 0 0 0	904 326 0 578	0 0 0 0
Department of Justice, total Office of Justice Programs	7,000 7,000	0	0	0	0	0	0	0 0	7,000 7,000
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	211,588 2,779 49,595 100,539 19,266	0 0 0 0	0 0 0 0	15 0 0 15 0	79,683 326 44,315 30,518 4,524	2,920 1,285 0 0 1,635	19,299 570 2,769 0 5,555	6,186 598 2,511 2,183 425	103,485 0 0 67,823 7,127
Federal Transit Administration	7,400	0	0	0	0	0	0	0	7,400
AdministrationResearch & Special Programs Admin	27,886 4,123	0 0	0	0	0	0	10,405 0	0 469	17,481 3,654
Department of Veterans Affairs	19,775	0	0	0	0	0	0	0	19,775

# Table C-47. Federal obligations for applied research in engineering, by agency and detailed field of engineering: fiscal year 1998

## [Dollars in thousands]

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									O
Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metallurgy and materials	Engi- neering, n.e.c.
Other agencies:									
Environmental Protection Agency Federal Communications Commission National Aeronautics & Space Admin National Science Foundation Nuclear Regulatory Commission	124,097 1,400 1,615,868 100,557 51,700	0 0 1,024,065 0 0	0 0 531,359 0 0	2,735 0 442 8,682 0	0 0 28 15,008 0	0 1,250 14,158 450 0	0 0 9,465 1,026 0	0 0 3,301 3,902 0	121,362 150 33,050 71,489 51,700
US Arms Control & Disarmament Agcy <sup>2</sup> United States Information Agency	60 258	0 0	0	0	0 0	0	0	0 0	60 258

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B. NOTE:

KEY: n.e.c. = Not elsewhere classified

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

# [Dollars in thousands]

Page 1 of 3

										rage 1 of 3
	Mathem	natics and	computer s	ciences			Social sc	iences		
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	1,131,356	83,338	979,612	68,406	581,330	4,664	188,940	15,600	77,368	294,758
Departments:										
Department of Agriculture, total	12,851 340	12,851 340	0 0	0 0	105,549 0	240 0	97,990 0	0 0	7,319 0	0
Education, & Extension Service Economic Research Service Forest Service	0 0 10,275	0 0 10,275	0 0 0	0 0 0	27,381 64,392 10,640	0 0 240	20,987 64,392 9,475	0 0 0	6,394 0 925	0 0 0
Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc		2,236 0	0 0	0 0	0 3,136	0 0	0 3,136	0 0	0 0	0
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin		12,610 0 0 3,449 9,161	56,336 0 0 45,691 10,645	7,458 2,907 0 4,551 0	21,448 1,307 557 0 19,584	0 0 0 0	5,414 0 557 0 4,857	8,228 0 0 0 8,228	6,499 0 0 0 6,499	1,307 1,307 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	32,015 45,433 10,617	37,084 7,689 6,236 0 23,159	476,710 22,218 36,932 10,617 406,943	7,717 2,108 2,265 0 3,344	176 0 176 0 0	0 0 0 0	0 0 0 0	0 0 0 0	176 0 176 0	0 0 0 0
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	30,344 389,007	0 21,542	27,000 367,465	3,344 0	0 0	0 0	0 0	0 0	0 0	0
Agency <sup>1</sup> Washington Headquarters Svcs		0 1,617	9,638 2,840	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Department of Education	1,156	0	1,156	0	119,331	0	0	0	0	119,331
Department of Energy	374,127	0	374,127	0	0	0	0	0	0	0
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch National Institutes of Health	0	16,806 0 0 309 16,497	30,981 0 0 12,063 18,918	0 0 0 0	118,846 2,435 23,456 42,528 36,479	0 0 0 0	39,092 0 0 39,092 0	0 0 0 0	1,011 0 0 921 90	78,743 2,435 23,456 2,515 36,389
Office of the Secretary, total Office of the Asst Secretary,		0	0	0	13,948	0	0	0	0	13,948
Planning & Evaluation		0	0	0	13,948	0	0	0	0	13,948
Dept of Housing & Urban Development	123	0	0	123	8,313	0	6,972	133	620	588

Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

# [Dollars in thousands]

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	Fage 2										
	Mathem	natics and	computer s	ciences			Social so	iences			
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Social sciences, n.e.c.	
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	6,874 0 4,126 1,155 1,593	904 0 844 60 0	5,970 0 3,282 1,095 1,593	0 0 0 0	20,885 100 1,125 4,018 15,642	0 597	2,593 50 0 2,534 9	0 0 0 0	1,543 0 656 887 0	12,988 50 469 0 12,469	
Department of Justice, total Bureau of Prisons Office of Justice Programs	500 500 0	0 0 0	0 0 0	500 500 0	18,005 3,326 14,679	0 0 0	100 100 0	0 0 0	15,879 1,200 14,679	2,026 2,026 0	
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	95 0 0 95	0 0 0 0	95 0 0 0 95	0 0 0 0	10,884 1,300 2,197 4,592 0	0	10,884 1,300 2,197 4,592	0 0 0 0	0 0 0 0	0 0 0 0	
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	0 0	0 0	0 0	0 0	55 2,740	0 0	55 2,740	0 0	0	0 0	
Department of State <sup>2</sup>	0	0	0	0	852	0	51	409	128	264	
Department of Transportation, total Coast Guard Federal Highway Administration Federal Railroad Administration National Highway Traffic Safety	22,805 1,133 15,249 1,925	195 0 195 0	16,465 1,133 14,377 955	6,145 0 677 970	8,602 0 2,775 0	0 0 0 0	1,943 0 1,943 0	240 0 240 0	0 0 0	6,419 0 592 0	
AdministrationResearch & Special Programs Admin	4,162 336	0 0	0 0	4,162 336	5,827 0	0 0	0 0	0 0	0	5,827 0	
Department of the Treasury, total	0 0 0	0 0 0	0 0 0	0 0 0	48,626 47,942 684	0 0 0	2,850 2,166 684	0 0 0	0 0 0	45,776 45,776 0	

# Table C-48. Federal obligations for applied research in mathematics and computer sciences and in social sciences, by agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

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										ugo o o. o
Mathematics and computer science							Social sc	iences		
Agency and subdivision	Total	Mathe- matics	Computer sciences		Total	Anthro- pology	Economics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Other agencies:										
Appalachian Regional Commission Federal Communications Commission Federal Trade Commission Internat'l Development Cooperation Agency, total	0 180 0	0 0 0	0 180 0	0 0 0	680 1,445 1,144 62,032	0 0 0	680 1,445 1,144 7,109	0 0 0 5,914	0 0 0 43,169	0 0 0 5,840
Agency, total	Ö	Ö	ő	Ö	62,032	Ő	7,109		43,169	5,840
National Aeronautics & Space Admin  National Science Foundation  Social Security Administration  US Arms Control & Disarmament Agcy <sup>2</sup> US International Trade Commission	57,816 9,127 0 0 0	2,688 200 0 0	8,665 8,927 0 0	46,463 0 0 0 0	0 9,799 17,422 126 7,165	0 663 0 0	0 3,508 0 0 7,165	0 550 0 126 0	0 1,024 0 0	0 4,054 17,422 0 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

# [Dollars in thousands]

		[Doll	lars in thou	ısands]					Pag	ge 1 of 3
						Extramura	al			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	40,981,024	9,149,264	27,204,645	344,716	1,624,829	1,147,175	729,882	388,498	207,386	184,629
Departments:										
Department of Agriculture, total Agricultural Marketing Service	703 68,215 20,462	99,318 703 64,259 16,595 65	0 0 0 0	0 0 0 0	7,257 0 3,432 3,825 0	0 0 0 0	283 0 241 42 0	0 0 0 0	1 0 1 0 0	282 0 282 0 0
Forest Service		15,500 2,196	0	0	0	0	0	0	0	0
Department of Commerce, total	3,396 88,991	48,428 3,396 16,090 25,671	72,722 0 72,722 0	0 0 0	7,616 0 174 1,720	5 0 5 0	9,473 0 0 0	0 0 0 0	3,341 0 0 25	0 0 0 0
National Telecommunications & Information Administration	21,782	3,271	0	0	5,722	0	9,473	0	3,316	0
Department of Defense, total	13,102,171 4,219,894	6,870,947 1,135,442 1,409,401 2,577,265 1,517,401	22,969,765 11,564,064 2,661,880 4,431,813 4,291,527	72,968 18,225 2,462 4,540 47,741	457,501 31,008 59,033 175,504 191,956	262,837 103,983 29,444 34,383 95,027	139,297 522 21,265 29,136 88,374	21,959 59,959		142,106 2,606 14,375 21,517 103,608
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency  Defense Threat Reduction		583,631 226,581 16,026 29,503	2,453,536 750,014 32,763 32,771	23,546 4,868 506 0	64,724 88,852 0 4,138	48,777 25,164 312 100	100 34,042 0 47,320	22,572 16,428 4,937 290	0 0 0 0	97,767 892 0 0
Agency <sup>2</sup>	70,704	9,803	53,242	192	4,849	1,376	0	702	0	540
Joint Staff Special Operations Command Washington Headquarters Svcs Operational Test & Evaluation,	126,996	53,945 38,480 559,432	0 86,973 882,228	0 1,543 17,086	0 0 29,393	0 0 19,298	0 0 6,912	0 0 7,200	0 0 3	0 0 4,409
Director	30,339	7,281	8,253	0	0	0	0	14,805	0	0
Secretary of Defense	242,045	224,157	12,228	0	0	0	0	5,660	0	0
Department of Defense, total advanced technology (at)	1,431,316 698,249 515,810	1,478,698 524,758 249,498 126,014 578,428	3,278,241 760,083 383,654 292,509 1,841,995	21,983 5,697 503 0 15,783	276,993 29,672 35,973 60,302 151,046	152,175 80,854 3,968 7,686 59,667	131,311 0 17,336 27,620 86,355	64,955 17,652 1,095 1,636 44,572	12,600 12,600 0 0	107,625 0 6,222 43 101,360
Ballistic Missile Defense Organization (at) Defense Advanced Research		133,941	703,779	588	25,705	14,504	50	21,816	0	95,669
Projects Agency (at) Defense Logistics Agency (at) Defense Threat Reduction	105,704		699,721 26,739	4,868 0	88,852 4,138	25,164 0	34,042 47,320	16,428 210	0	892 0
Agency (at) <sup>2</sup> Joint Staff (at)		9,803 53,945	53,242 0	192 0	4,849 0	1,376 0	0	702 0	0	540 0
Special Operations Command (at) Washington Headquarters Services (at)		15,997 145,701	36,151 322,363	648 9,487	0 27,502	0 18,623	0 4,943	0 5,416	0	0 4,259
Services (at)	550,294	173,701	322,303	∌, <del>4</del> 07	21,502	10,023	7,343	3,410		7,239

Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

# [Dollars in thousands]

		[Doll	lars in thou	ısands]					Pag	ge 2 of 3
						Extramura	ıl			
					United State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of Defense, total major systems (ms)	25,791,751 11,670,855 3,521,645 6,818,307 3,508,560	5,392,249 610,684 1,159,903 2,451,251 938,973	19,691,524 10,803,981 2,278,226 4,139,304 2,449,532	50,985 12,528 1,959 4,540 31,958	180,508 1,336 23,060 115,202 40,910	110,662 23,129 25,476 26,697 35,360	7,986 522 3,929 1,516 2,019	225,508 118,299 20,864 58,323 7,557	97,848 97,770 75 0 3	34,481 2,606 8,153 21,474 2,248
Ballistic Missile Defense Organization (ms) Defense Advanced Research	2,298,601	449,690	1,749,757	22,958	39,019	34,273	50	756	0	2,098
Projects Agency (ms) Defense Information Systems	85,130	34,837	50,293	0	0	0	0	0	0	0
Agency (ms) Defense Logistics Agency (ms) Special Operations Command (ms)	54,544 8,418 74,200	16,026 2,206 22,483	32,763 6,032 50,822	506 0 895	0 0 0	312 100 0	0 0 0	4,937 80 0	0 0 0	0 0 0
Washington Headquarters Services (ms) Operational Test & Evaluation,	987,667	413,731	559,865	7,599	1,891	675	1,969	1,784	3	150
Director (ms) Test & Evaluation, Deputy Under	30,339	7,281	8,253	0	0	0	0	14,805	0	0
Secretary of Defense (ms)	242,045	224,157	12,228	0	00.440	0	0	5,660	0	0
Department of Education  Department of Energy	55,713 2,086,293	2,554 280,215	10,138	0 249,019	22,110 59,660	0 302,070	20,661 14,515	95,528	250 419	946
Dept of Health & Human Svcs, total Administration on Aging Agcy for HIth Care Policy & Rsch National Institutes of Health Office of the Secretary, total	1,685,758 7,991 7,700 1,591,023 3,054	371,845 341 7,700 363,526 277	102,465 228 0 102,237	19,913 0 0 19,913 0	874,728 850 0 849,063 2,777	2,460 0 0		1,387 0 0 1,387	32,864 1,946 0 10,402	4,208 0 0 4,208 0
Office of Public Hlth & Science Substance Abuse & Mental Health	3,054	277	0	0	2,777	0	0	0	0	0
Services Administration <sup>3</sup>	75,990	1	0	0	22,038	0	33,435	0	20,516	0
Dept of Housing & Urban Development	18,796	10,697	5,594	0	180	0	2,325	0	0	0
Department of the Interior, total	29,117 2,209 26,908	24,569 1,000 23,569	2,895 0 2,895	0 0 0	1,609 1,209 400	0 0 0	0 0 0	0 0 0	44 0 44	0 0 0
Department of Justice, total Bureau of Prisons Federal Bureau of Investigation Office of Justice Programs	58,573 3,784 35,812 18,977	36,313 500 35,812 1	1,479 0 0 1,479	0 0 0 0	1,733 0 0 1,733	0 0 0	3,949 0 0 3,949	0 0 0 0	15,099 3,284 0 11,815	0 0 0 0
Department of Labor, total  Employment & Training Admin  Office of the Secretary  Pension Benefit Guaranty Corp	5,682 5,025 105 552	334 108 30 196	356 0 0 356	0 0 0	75 0 75 0	0 0 0 0	4,917 4,917 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	165,071 15,329 76,431 57,664 312	86,251 9,504 61,130 9,148 156	26,334 5,825 9,617 9,994 156	190 0 0 190 0	12,078 0 5,684 2,497 0	0 0 0 0	5,194 0 0 1,785 0	0 0 0 0	35,024 0 0 34,050 0	0 0 0 0
Federal Transit Administration Office of the Secretary	10,183 3,433 1,719	1,903 3,433 977	0 0 742	0 0 0	3,897 0 0	0 0 0	3,409 0 0	0 0 0	974 0 0	0 0 0

## Table C-49. Federal obligations for development, by agency and performer: fiscal year 1998 (revised)

## [Dollars in thousands]

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						Extramura	al			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service United States Customs Service United States Mint	12,515 123 4,086 8,250 56	4,807 123 1,849 2,834 1	7,708 0 2,237 5,416 55	0 0 0 0	00000	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Veterans Affairs Other agencies:	8,028	8,028	0	0	0	0	0	0	0	0
Environmental Protection Agency Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin Tennessee Valley Authority	94,000 39,109 39,109 1,087 5,154,378 1,846	8,059 3,520 3,520 425 1,291,108 1,846	24,823 391 391 637 2,895,417	0 0 0 0 2,626	39,598 1,564 1,564 25 139,095	0 0 0 0 579,803	16,701 33,243 33,243 0 203,436	0	4,181 0 0 0 5,715	638 391 391 0 36,058

- Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.
- The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.
- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-50. Preliminary Federal obligations for development, by agency and performer: fiscal year 1999

# [Dollars in thousands]

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									Pa	ge 1 of 3
						Extramura	al			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	41,529,635	9,831,528	26,999,147	398,154	1,789,928	1,145,629	747,540	410,818	84,277	122,614
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Hith Inspection Svc Food Safety Inspection Service	120,797 696 74,961 19,979 65	113,118 696 70,324 16,937 65	0 0 0 0	0 0 0 0	7,098 0 4,098 3,000 0	0 0 0 0	283 0 241 42 0	0	1 0 1 0 0	297 0 297 0
Forest Service	22,900	22,900	0	0	0	0	0	0	0	0
Stockyards Administration	2,196	2,196	0	0	0	0	0	0	0	0
Department of Commerce, total	162,614 6,478 113,799 22,066	47,795 6,478 16,345 20,307	97,224 0 97,224 0	0 0 0	6,748 0 223 1,687	7 0 7 0	7,959 0 0 0	0 0 0 0	2,881 0 0 72	0 0 0 0
Information Administration	20,271	4,665	0	0	4,838	0	7,959	0	2,809	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	31,494,985 12,771,144 4,303,007 7,809,362 6,343,090	7,494,222 1,211,343 1,464,549 2,775,896 1,830,410	11,318,758 2,626,415 4,693,880	91,533 16,299 6,395 4,348 64,491	467,378 7,362 85,392 190,863 183,761	219,268 71,582 37,453 25,319 84,914	123,715 3,666 47,718 33,382 38,949	126,675 27,165 66,539	11,596 9,607 1,945 10 34	80,039 5,852 5,975 19,125 49,087
Ballistic Missile Defense Org	3,708,231 977,681 108,132 63,586	904,717 195,143 45,244 24,003	2,614,747 638,794 50,344 35,939	44,254 4,110 0 115	38,970 75,020 0 3,329	47,252 21,247 318 0	0 28,743 6,115 0	13,871 6,111	0 0 0 0	43,110 753 0 0
Defense Threat Reduction Agency <sup>2</sup>	123,028	17,101	92,641	369	8,366	2,337	0	1,230	0	984
Joint Staff	161,241 188,639 1,012,552	161,241 57,158 425,803	0 130,231 476,431	0 1,250 14,393	0 0 58,076	0 0 13,760	0 0 4,091	0 0 15,724	0 0 34	0 0 4,240
Director	31,759	5,199	8,725	0	0	0	0	17,835	0	0
Secretary of Defense	236,623	206,825	21,665	0	0	0	0	8,133	0	0
Department of Defense, total advanced technology (at) Department of the Air Force (at) Department of the Army (at) Department of the Navy (at) Defense Agencies, total (at)	5,741,678 585,768 801,350 594,793 3,759,767	1,401,217 150,659 318,932 128,186 803,440	3,703,812 351,984 379,246 360,396 2,612,186	21,125 582 4,686 0 15,857	294,038 5,741 64,622 67,006 156,669	111,973 54,320 4,117 3,311 50,225		12,850 1,540 2,810	11,498 9,607 1,870 0 21	25 0 348
Ballistic Missile Defense Organization (at) Defense Advanced Research	1,973,373	292,320	1,594,962	1,800	15,163	13,406	0	14,414	0	41,308
Projects Agency (at)	896,434 55,736	161,895 23,960		4,110 115	75,020 3,329	21,247 0	28,743 0	0	0 0	753 0
Agency (at) <sup>2</sup>	123,028 161,241	17,101 161,241	92,641 0	369 0	8,366 0	2,337 0	0 0	1,230 0	0 0	984 0
Special Operations Command (at) Washington Headquarters Services (at)	78,772 471,183	23,868 123,055	54,379 251,077	525 8,938	0 54,791	0 13,235	0 2,048		0 21	0 4,217
	,.50	5,556		3,000	,. 0 1	. 5,250	_,0.0	12,001		

# Table C-50. Preliminary Federal obligations for development, by agency and performer: fiscal year 1999

# [Dollars in thousands]

[Dollars in thousands] Page 2 of 3											
						Extramura	ı				
					United State	es and territo	ories				
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign	
Department of Defense, total major systems (ms)  Department of the Air Force (ms)  Department of the Army (ms)  Department of the Navy (ms)  Defense Agencies, total (ms)	25,753,307 12,185,376 3,501,657 7,214,569 2,583,323	6,093,005 1,060,684 1,145,617 2,647,710 1,026,970		70,408 15,717 1,709 4,348 48,634	173,340 1,621 20,770 123,857 27,092	107,295 17,262 33,336 22,008 34,689	33,851 3,666 21,381 646 8,158	238,148 113,825 25,625 63,729 9,001	98 0 75 10 13	32,404 5,827 5,975 18,777 1,825	
Ballistic Missile Defense Organization (ms)	1,734,858	612,397	1,019,785	42,454	23,807	33,846	0	767	0	1,802	
Defense Advanced Research Projects Agency (ms) Defense Information Systems	81,247	33,248	47,999	0	0	0	0	0	0	0	
Agency (ms) Defense Logistics Agency (ms) Special Operations Command (ms)	108,132 7,850 109,867	45,244 43 33,290	50,344 7,607 75,852	0 0 725	0 0 0	318 0 0	6,115 0 0	6,111 200 0	0 0 0	0 0 0	
Washington Headquarters Services (ms) Operational Test & Evaluation,	541,369	302,748	225,354	5,455	3,285	525	2,043	1,923	13	23	
Director (ms) Test & Evaluation, Deputy Under	31,759	5,199	8,725	0	0	0	0	17,835	0	0	
Secretary of Defense (ms)  Department of Education	236,623 67,894	206,825 5,554	21,665 8,654	0	0 27,555	0	0 25,860	8,133	0 271	0	
Department of Energy	2,369,044	342,577	1,220,883	280,638	54,317	355,080	4,887		550	600	
Dept of Health & Human Svcs, total Administration on Aging Agcy for Hith Care Policy & Rsch National Institutes of Health Office of the Secretary, total	1,932,270 17,266 10,100 1,825,243 3,671	397,519 341 10,100 386,777 300	119,094 200 0 118,894	23,157 0 0 23,157 0	1,024,434 650 0 998,375 3,371	2,861 0 2,861 0	319,660 9,650 0 276,575	1,613 0 0 1,613	39,038 6,425 0 12,097 0	4,894 0 0 4,894 0	
Office of Public Hlth & Science Substance Abuse & Mental Health Services Administration <sup>3</sup>	3,671 75,990	300 1	0	0	3,371 22,038	0	0 33,435	0	0 20,516	0	
Dept of Housing & Urban Development	38,130	19,800	11,933	0	472	0	5,925	0	0	0	
Department of the Interior, total Bureau of Reclamation Geological Survey	30,132 2,017 28,115	25,731 1,000 24,731	2,895 0 2,895	0 0 0	1,462 1,017 445	0 0 0	0 0 0	0 0 0	44 0 44	0 0 0	
Department of Justice, total  Bureau of Prisons  Federal Bureau of Investigation  Immigration & Naturalization Svc  Office of Justice Programs	60,633 3,883 36,160 500 20,090	36,861 500 36,160 200 1	3,015 0 0 300 2,715	0 0 0 0	2,250 0 0 0 2,250	0 0 0 0	2,831 0 0 0 2,831	0 0 0 0	15,676 3,383 0 0 12,293	0 0 0 0	
Department of Labor, total Employment & Training Admin Office of the Secretary Pension Benefit Guaranty Corp	5,305 4,579 100 626	353 114 30 209	417 0 0 417	0 0 0 0	70 0 70 0	0 0 0 0	4,465 4,465 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	211,562 13,472 61,254 104,965 300	98,445 8,737 32,388 43,610 150	85,208 4,735 21,761 56,501 150	272 0 0 272 0	18,005 0 7,105 1,200 0	0 0 0 0	5,262 0 0 1,762 0	0 0 0 0	4,370 0 0 1,620 0	0 0 0 0	
Federal Transit Administration Office of the SecretaryResearch & Special Programs Admin	18,118 9,631 3,822	1,785 9,631 2,144	383 0 1,678	0 0 0	9,700 0 0	0 0 0	3,500 0 0	0 0 0	2,750 0 0	0 0 0	

# Table C-50. Preliminary Federal obligations for development, by agency and performer: fiscal year 1999

#### [Dollars in thousands]

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						Extramura	ıl			
					United State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service United States Customs Service United States Mint	11,339 132 3,311 7,166 730	4,819 132 1,802 2,834 51	6,520 0 1,509 4,332 679	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Veterans Affairs	9,328	9,328	0	0	0	0	0	0	0	0
Other agencies:										
Consumer Product Safety Commission Environmental Protection AgencyInternat'l Development Cooperation	140 93,000	90 7,973	50 24,559	0	0 39,177	0	0 16,523	0	0 4,137	0 631
Agency, total	46,039 46,039 1,511 4,874,912	5,525 5,525 636 1,221,182	460 460 850 2,708,815	0 0 0 2,554	1,842 1,842 25 139,095	0 0 0 568,413	37,752 37,752 0 192,418	0 0 0 1,029	0 0 0 5,713	460 460 0 35,693

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-51. Preliminary Federal obligations for development, by agency and performer: fiscal year 2000

# [Dollars in thousands]

Page 1 of 3

									Pa	ge 1 of 3
						Extramura	ıl			
					United State	es and territ	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	40,424,760	8,865,954	26,930,342	389,303	1,769,444	1,097,883	711,295	447,755	74,515	138,269
Departments:										
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Hith Inspection Svc Food Safety Inspection Service	123,503 749 77,028 20,033 65	116,691 749 73,216 17,033 65	0 0 0 0	0 0 0 0	6,402 0 3,402 3,000 0	0 0 0 0	88 0 88 0	0 0 0 0	1 0 1 0 0	321 0 321 0 0
Forest Service	22,900	22,900	0	0	0	0	0	0	0	0
Stockyards Administration	2,728	2,728	0	0	0	0	0	0	0	0
Department of Commerce, total  Bureau of the Census  Nat'l Inst of Standards & Tech  Nat'l Oceanic & Atmospheric Admin  National Telecommunications &	166,240 3,281 119,551 23,306	44,773 3,281 16,847 21,543	102,470 0 102,470 0	0 0 0	7,188 0 227 1,691	7 0 7 0	8,670 0 0 0	0 0 0 0	3,132 0 0 72	0 0 0 0
Information Administration	20,102	3,102	0	0	5,270	0	8,670	0	3,060	0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	30,324,989 13,636,869 3,729,270 7,312,364 5,367,967	6,438,549 1,041,815 1,042,400 2,599,134 1,532,309		82,826 21,817 3,771 3,825 53,413	351,250 20,453 19,375 147,827 163,595	138,955 7,637 29,979 27,161 74,178	59,577 2,926 8,933 6,490 41,228	105,442 23,158 69,561	4,116 4,075 0 0 41	99,078 12,520 2,988 17,794 65,776
Ballistic Missile Defense Org	2,869,617 975,595 115,287 28,975	762,607 194,771 51,184 14,604	1,938,136 637,419 51,108 11,231	33,557 4,100 0 200	30,115 74,844 0 2,840	33,888 21,197 325 0	1,700 28,675 7,160 0	10,102 13,838 5,510 100	0 0 0 0	59,512 751 0 0
Defense Threat Reduction Agency <sup>2</sup>	145,143	20,175	109,293	435	9,870	2,758	0	1,451	0	1,161
Joint Staff	49,073 174,613 1,009,664	49,073 52,907 386,988	0 120,543 468,478	0 1,163 13,958	0 0 45,926	0 0 16,010	0 0 3,693	0 0 70,218	0 0 41	0 0 4,352
DirectorTest & Evaluation, Deputy Under	25,415	2,989	4,526	0	0	0	0	17,900	0	0
Secretary of Defense	253,104	219,902	24,243	0	0	0	0	8,959	0	0
Department of Defense, total advanced technology (at)  Department of the Air Force (at)  Department of the Army (at)  Department of the Navy (at)  Defense Agencies, total (at)	4,575,119 662,005 549,929 523,944 2,839,241	1,045,262 159,135 208,384 126,291 551,452	3,042,541 466,814 328,608 345,193 1,901,926	25,379 3,645 2,999 0 18,735	204,092 18,916 5,156 42,755 137,265	47,139 492 416 1,866 44,365	0 1,998 5,905	2,265 1,880	3,051 3,030 0 0 21	64,406 20 103 54 64,229
Ballistic Missile Defense Organization (at) Defense Advanced Research	1,110,250	145,963	881,814	1,007	7,602	4,829	1,700	9,335	0	58,000
Projects Agency (at)  Defense Logistics Agency (at)  Defense Threat Reduction	894,326 24,001	161,514 14,554	589,407 6,407	4,100 200	74,844 2,840	21,197 0	28,675 0	13,838 0	0	751 0
Agency (at) <sup>2</sup>	145,143 49,073	20,175 49,073	109,293 0	435 0	9,870 0	2,758 0	0 0	1,451 0	0 0	1,161 0
Special Operations Command (at) Washington Headquarters	72,916	22,093	50,334	489	0	0	0 1.861	0 64,388	0 21	0
Services (at)	543,532	138,080	264,671	12,504	42,109	15,581	1,001	04,388	21	4,317

# Table C-51. Preliminary Federal obligations for development, by agency and performer: fiscal year 2000

# [Dollars in thousands]

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						Extramura	.I		Pa	ge 2 of 3
						Extramula				
					United State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of Defense, total major										
systems (ms)  Department of the Air Force (ms)	25,749,870 12,974,864	5,393,287 882,680	19,781,858 11,953,370	57,447 18,172	147,158 1,537	91,816 7,145	19,438 2,926		1,065 1,045	34,672 12,500
Department of the Army (ms)	3,179,341	834,016	2,270,058	772	14,219	29,563	6,935	20,893	0	2,885
Department of the Navy (ms) Defense Agencies, total (ms)	6,788,420 2,528,726	2,472,843 980,857	4,095,379 1,434,282	3,825 34,678	105,072 26,330	25,295 29,813	585 8,992	67,681 12,207	0 20	17,740 1,547
Ballistic Missile Defense Organization (ms)	1,759,367	616,644	1,056,322	32,550	22,513	29,059	0	767	0	1,512
Defense Advanced Research		· ·		0	0		0	0	0	0
Projects Agency (ms)  Defense Information Systems		33,257	48,012			0		_		
Agency (ms)  Defense Logistics Agency (ms)	115,287 4,974	51,184 50	51,108 4,824	0	0	325 0	7,160	5,510 100	0	0
Special Operations Command (ms)	101,697	30,814	70,209	674	ő	ő	ő	0	ő	ő
Washington Headquarters Services (ms)	466,132	248,908	203,807	1,454	3,817	429	1,832	5,830	20	35
Operational Test & Evaluation, Director (ms)	25,415	2,989	4,526	0	0	0	0	17,900	0	0
Test & Evaluation, Deputy Under Secretary of Defense (ms)	253,104	219,902	24,243	0	0	0	0	8,959	0	0
Department of Education	99,246	22,936	5,795	0	35,750	0	34,492	0	273	0
Department of Energy	2,144,971	355,526	955,712	279,427	67,218	363,540	3,388	119,085	500	575
Dept of Health & Human Svcs, total	2,047,241 17,341	408,619 341	121,907 200	23,705 0	1,100,044 850	2,928 0	343,358 9,650	1,651 0	40,020 6,300	5,009 0
Agcy for Hlth Care Policy & Rsch	9,000	9,000	0	0	0	0	0	0	0,500	0
National Institutes of Health Office of the Secretary, total	1,936,400 4,500	398,709 450	121,707 0	23,705 0	1,071,887 4,050	2,928 0	298,421 0	1,651 0	12,383 0	5,009 0
Office of Public HIth & Science	4,500	450	0	0	4,050	0	0	0	0	0
Substance Abuse & Mental Health Services Administration <sup>3</sup>	80,000	119	0	0	23,257	0	35,287	0	21,337	0
Dept of Housing & Urban Development	32,571	19,170	8,839	0	385	0	4,177	0	0	0
Department of the Interior, total  Bureau of Reclamation	32,568	28,075 1,500	3,025 0	0	1,424 979	0	0	0	44 0	0
Geological Survey	2,479 30,089	26,575	3,025	0	445	0	0	0	44	0
Department of Justice, total	56,787	37,209	2,553	0	4,450	0	162	0	12,413	0
Bureau of PrisonsFederal Bureau of Investigation	3,984 36,208	500 36,208	0	0	0	0	0	0	3,484 0	0
Immigration & Naturalization Svc	500	500	0	0	0	0	0	0	0	0
Office of Justice Programs	16,095	1	2,553	0	4,450	0	162		8,929	0
Department of Labor, total Employment & Training Admin	3,792 3,048	361 117	430 0	0	70 0	0	2,931 2,931	0	0	0
Office of the SecretaryPension Benefit Guaranty Corp	100	30 214	0 430	0	70 0	0	0	0	0	0
, ,						0				
Department of Transportation, total  Coast Guard	254,245 17,000	118,642 10,247	112,315 6,753	848 0	17,053 0	0	744 0	0	4,643 0	0
Federal Aviation Administration	60,657	26,891	25,595	0	8,171	0	0	0	0	0
Federal Highway Administration Federal Railroad Administration	153,633 300	73,008 150	75,458 150	248 0	2,432 0	0 0	744 0	0	1,743 0	0 0
Federal Transit Administration	15,125	1,975	3,200	600	6,450	0	0	0	2,900	0
Office of the SecretaryResearch & Special Programs Admin	4,475 3,055	4,475 1,896	0 1,159	0	0	0	0	0	0	0
Research α Special Flograms Aumin	3,035	1,090	1,139	U	U	U			0	

# Table C-51. Preliminary Federal obligations for development, by agency and performer: fiscal year 2000

#### [Dollars in thousands]

Page 3 of 3

						Extramura	ıl			
					United State	es and territo	ories			
Agency and subdivision	Total Intra- mural <sup>1</sup>		Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service United States Customs Service United States Mint	11,408 110 3,435 7,383 480	4,985 110 1,860 2,940 75	6,423 0 1,575 4,443 405	0 0 0 0	0000	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Department of Veterans Affairs  Other agencies:	9,000	9,000	0	0	0	0	0	0	0	0
Consumer Product Safety Commission Environmental Protection Agency Internat'l Development Cooperation Agency, total	146 88,000 50,501	96 7,545 6,060	50 23,239 505	0 0	0 37,070 2,020	0 0	0 15,635 41,411	0 0	0 3,914 0	0 597 505
Agerly, idel Agery for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin	50,501 50,501 1,230 4,978,322	6,060 6,060 705 1,247,012	505 505 500 2,762,180	0 0 0 2,497	2,020 2,020 25 139,095	0 0 592,453	41,411 0	0 0 0 780	0 0 5,459	505 505 0 32,184

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** FFRDCs = Federally funded research and development centers

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-52. Federal funds for R&D plant, by agency: fiscal years 1998, 1999, and 2000

## [Dollars in thousands]

		Obligations			Outlays		
Agency and subdivision	1998	Prelim	ninary	1998	Prelim	inary	
		1999	2000		1999	2000	
Total, all agencies	1,840,164	2,298,773	2,081,220	1,861,137	2,004,726	2,122,728	
Departments:							
Department of Agriculture, total Agricultural Research Service Cooperative State Rsch, Ed, & Extension Svc Forest Service	89,788	120,751	111,242	159,113	160,400	140,950	
	86,302	115,751	106,242	95,033	115,742	110,795	
	886	0	0	61,480	39,658	25,155	
	2,600	5,000	5,000	2,600	5,000	5,000	
Department of Commerce, total  National Institute of Standards & Technology  National Oceanic & Atmospheric Administration	48,272	152,432	136,557	69,390	41,106	71,422	
	21,372	139,010	106,796	42,490	27,684	41,661	
	26,900	13,422	29,761	26,900	13,422	29,761	
Department of Defense, total  Department of the Air Force Department of the Army, total Department of the Army, Military Functions Department of the Navy	65,763	108,361	33,404	39,729	61,865	38,535	
	26,195	47,164	22,087	3,690	4,045	2,412	
	3,936	4,051	209	4,118	4,145	1,754	
	3,936	4,051	209	4,118	4,145	1,754	
	34,553	35,783	11,108	22,903	27,515	30,995	
Defense Agencies, total Ballistic Missile Defense Organization Defense Logistics Agency Washington Headquarters Services	1,079	21,363	0	9,018	26,160	3,374	
	890	21,235	0	7,819	25,154	2,504	
	189	128	0	189	128	0	
	0	0	0	1,010	878	870	
Department of Energy	727,096	848,171	940,184	776,280	834,853	940,105	
Department of Health & Human Services, total	286,276	379,605	213,911	156,889	249,667	275,690	
	28,094	11,350	31,750	13,000	22,000	19,000	
	855	875	785	855	875	785	
	257,327	367,380	181,376	143,034	226,792	255,905	
Department of the Interior, total Minerals Management Service	1,500	1,100	1,100	1,601	1,278	1,132	
	1,500	1,100	1,100	1,601	1,278	1,132	
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	17,617	15,394	13,582	21,291	17,495	15,569	
	260	266	272	260	266	272	
	14,290	14,290	12,800	18,949	16,036	14,141	
	2,000	10	10	1,084	496	756	
	1,067	828	500	998	697	400	
Department of the Treasury, total	125	125	125	125	125	125	
	125	125	125	125	125	125	
Department of Veterans Affairs	382	277	999	1,219	6,100	5,200	
Other agencies:							
Environmental Protection Agency General Services Administration National Aeronautics & Space Administration National Science Foundation Smithsonian Institution	66,000	106,000	110,000	21,000	89,000	114,000	
	0	46	0	0	837	0	
	350,000	361,400	324,900	320,000	330,000	320,000	
	184,345	201,111	191,216	292,000	209,000	197,000	
	3,000	4,000	4,000	2,500	3,000	3,000	

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

# Table C-53. Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 1998

## [Dollars in thousands]

						Extramura	I			
				ι	Jnited State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	1,840,164	475,261	487,733	45,581	139,496	663,620	10,867	12,148	5,458	0
Departments:										
Department of Agriculture, total	89,788 86,302	88,902 86,302	0	0 0	0 0	0 0	886 0	0		0 0
Education, & Extension Service Forest Service	886 2,600	0 2,600	0 0	0 0	0 0	0 0	886 0	0		0 0
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	48,272 21,372 26,900	48,272 21,372 26,900	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		Ö	0 0 0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	65,763 26,195 3,936 34,553 1,079	57,211 23,369 1,392 32,450 0	8,360 2,826 2,417 2,103 1,014	0 0 0 0	0 0 0 0	127 0 127 0 0	65 0 0 0 65	0 0 0 0	0 0	0 0 0 0
Ballistic Missile Defense Org Defense Logistics Agency	890 189	0 0	890 124	0	0	0	0 65		0	0
Department of Energy	727,096	145	30,385	44,081	11,826	628,438	73	12,148	0	0
Dept of Health & Human Svcs, total Food & Drug Administration Health Resources & Services Admin National Institutes of Health	286,276 28,094 855 257,327	263,385 28,094 855 234,436	0 0 0	1,500 0 0 1,500	16,540 0 0 16,540	0 0 0	4,851 0 0 4,851	0 0 0 0		0 0 0 0
Department of the Interior, total	1,500 1,500	224 224	1,276 1,276	0 0	0 0	0 0	0	0		0 0
Department of Transportation, total  Coast Guard  Federal Aviation Administration  Federal Highway Administration  Federal Railroad Administration	17,617 260 14,290 2,000 1,067	1,000 0 1,000 0 0	11,067 0 8,000 2,000 1,067	0 0 0 0	260 260 0 0 0	0 0 0 0	0 0 0 0	0 0	5,290 0	0 0 0 0
Department of the Treasury, total United States Customs Service	125 125	0 0	125 125	0 0	0 0	0 0	0			0 0
Department of Veterans Affairs	382	382	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency National Aeronautics & Space Admin National Science Foundation Smithsonian Institution	66,000 350,000 184,345 3,000	9,689 3,051 3,000	66,000 328,311 42,209 0	0 0 0	0 0 110,870 0	0 12,000 23,055 0	0 0 4,992 0	0 0 0 0	0 168	0 0 0 0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-54. Preliminary Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 1999

## [Dollars in thousands]

						Extramura	I			
				ι	Jnited State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	2,298,773	717,425	570,775	172,300	157,075	650,647	10,447	14,631	5,473	0
Departments:										
Department of Agriculture, total Agricultural Research Service Forest Service	120,751 115,751 5,000	120,751 115,751 5,000	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0
Department of Commerce, total Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	152,432 139,010 13,422	152,432 139,010 13,422	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		Ō	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	108,361 47,164 4,051 35,783 21,363	78,736 44,159 407 34,170 0	29,445 3,005 3,464 1,613 21,363	0 0 0 0	0 0 0 0	180 0 180 0 0	0 0 0 0		0 0	0 0 0 0
Ballistic Missile Defense Org Defense Logistics Agency	21,235 128	0 0	21,235 128	0 0	0	0 0	0		0	0
Department of Energy	848,171	406	41,408	170,800	9,311	611,615	0	14,631	0	0
Dept of Health & Human Svcs, total Food & Drug Administration	379,605 11,350 875 367,380	346,605 11,350 875 334,380	0 0 0	1,500 0 0 1,500	26,500 0 0 26,500	0 0 0	5,000 0 0 5,000	0 0 0 0	0	0 0 0 0
Department of the Interior, total	1,100 1,100	200 200	900 900	0 0	0 0	0 0	0 0	0		0 0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	15,394 266 14,290 10 828	1,000 0 1,000 0 0	8,838 0 8,000 10 828	0 0 0 0	266 266 0 0	0 0 0 0	0 0 0 0	0	5,290 0	0 0 0 0
Department of the Treasury, total United States Customs Service	125 125	0 0	125 125	0 0	0 0	0 0	0	0		0 0
Department of Veterans Affairs	277	277	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency General Services Administration National Aeronautics & Space Admin National Science Foundation Smithsonian Institution	106,000 46 361,400 201,111 4,000	0 0 9,689 3,329 4,000	106,000 0 338,011 46,048 0	0 0 0 0	0 45 0 120,953 0	0 0 13,700 25,152 0	0 1 0 5,446 0	0 0 0 0	0	0 0 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-55. Preliminary Federal obligations for R&D plant, by agency and performer of the research and development the plant supports: fiscal year 2000

## [Dollars in thousands]

						Extramura	ıl			
				ι	United State	es and territo	ories			
Agency and subdivision	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit insti- tutions	FFRDCs admin by non- profit insti- tutions	State and local govts	Foreign
Total, all agencies	2,081,220	476,586	516,637	248,852	147,311	668,184	10,178	11,975	1,497	0
Departments:										
Department of Agriculture, total Agricultural Research Service Forest Service	111,242 106,242 5,000	111,242 106,242 5,000	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Commerce, total	136,557 106,796 29,761	136,557 106,796 29,761	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy	33,404 22,087 209 11,108	28,497 19,438 1 9,058	4,907 2,649 208 2,050	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Ō	0 0 0 0	0 0 0 0
Department of Energy	940,184	430	40,420	247,352	5,537	634,470	0	11,975	0	0
Dept of Health & Human Svcs, total Food & Drug Administration Health Resources & Services Admin National Institutes of Health	213,911 31,750 785 181,376	180,911 31,750 785 148,376	0 0 0	1,500 0 0 1,500	26,500 0 0 26,500	0 0 0	5,000 0 0 5,000	0 0 0 0	0 0 0	0 0 0 0
Department of the Interior, total	1,100 1,100	200 200	900 900	0 0	0 0	0 0	0	0	0	0 0
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	13,582 272 12,800 10 500	896 0 896 0	11,091 0 10,581 10 500	0 0 0 0	272 272 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1,323 0 1,323 0	0 0 0 0
Department of the Treasury, total United States Customs Service	125 125	0 0	125 125	0 0	0 0	0 0	0	0	0	0 0
Department of Veterans Affairs	999	999	0	0	0	0	0	0	0	0
Other agencies:										
Environmental Protection Agency National Aeronautics & Space Admin National Science Foundation Smithsonian Institution	110,000 324,900 191,216 4,000	0 9,689 3,165 4,000	110,000 305,411 43,783 0	0 0 0 0	0 0 115,002 0	9,800 23,914 0	0 0 5,178 0	0 0 0 0	0 0 174 0	0 0 0 0

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-56. Federal obligations for research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

## [Dollars in thousands]

Field of science and engineering	1998	Prelin	ninary
		1999	2000
Total, all fields	11,312,744	12,763,933	13,018,477
Life sciences, total Biological (excluding environmental) Environmental biology Agricultural Medical Life sciences, n.e.c.	7,005,369	8,161,258	8,178,591
	3,739,058	NA	NA
	158,273	NA	NA
	171,963	NA	NA
	2,714,380	NA	NA
	221,695	NA	NA
Psychology, total Biological aspects Social aspects Psychological sciences, n.e.c.	297,318	337,571	355,757
	23,104	NA	NA
	11,891	NA	NA
	262,323	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	1,204,162	1,255,084	1,301,418
	173,413	NA	NA
	331,412	NA	NA
	577,136	NA	NA
	122,201	NA	NA
Environmental sciences, total  Atmospheric  Geological  Oceanography  Environmental sciences, n.e.c.	652,837	688,645	728,730
	165,621	NA	NA
	171,408	NA	NA
	197,197	NA	NA
	118,611	NA	NA
Mathematics & computer sciences, total  Mathematics  Computer sciences  Mathematics & computer sciences, n.e.c.	624,106	677,743	745,402
	132,516	NA	NA
	470,433	NA	NA
	21,157	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	993,735	1,034,969	1,085,836
	62,107	NA	NA
	8,819	NA	NA
	73,351	NA	NA
	47,407	NA	NA
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	177,287	NA	NA
	76,403	NA	NA
	246,636	NA	NA
	301,725	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	189,508	215,831	219,076
	10,733	NA	NA
	48,465	NA	NA
	5,077	NA	NA
	13,846	NA	NA
	111,387	NA	NA
Other sciences, n.e.c.	345,709	392,832	403,667

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in fiscal years 1998, 1999, and 2000. NOTES:

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

= Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year) KEY: NA

= Not elsewhere classified

# Table C-57. Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	11,312,744	7,005,369	297,318	1,204,162	652,837	624,106	993,735	189,508	345,709
Departments:									
Department of Agriculture, total	408,122 274 34,704	329,627 274 30,662	0 0 0	17,670 0 3,261	2,294 0 178	610 0 49	14,416 0 554	43,505 0 0	0 0 0
Education, & Extension Service Economic Research Service	349,997 4,961	286,335 0	0 0	14,409 0	990 0	0 0	13,685 0	34,578 4,961	0
Foreign Agricultural Service	451 15,610 205 1,920	451 11,905 0 0	0 0 0 0	0 0 0	0 1,126 0 0	0 356 205 0	0 177 0 0	0 2,046 0 1,920	0 0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	964,689 85,722 108,916 225,873 544,178	130,862 7,352 38,532 16,358 68,620	16,016 318 1,475 11,413 2,810	108,535 23,798 11,850 22,261 50,626	87,057 125 11,568 60,437 14,927	243,865 17,123 9,804 17,901 199,037	375,916 37,006 35,673 97,503 205,734	0 0 0 0	2,438 0 14 0 2,424
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	7,081 261,874	0 18,798	0 0	1,044 9,018	0 100	215 167,740	5,822 66,218	0 0	0
Agency <sup>1</sup>	2,414 1,363 271,446	0 0 49,822	0 0 2,810	0 0 40,564	0 0 14,827	0 0 31,082	157 1,196 132,341	0 0 0	2,257 167 0
Department of Energy	563,536	78,829	0	332,245	64,424	9,893	77,736	0	409
Dept of Health & Human Svcs, total Admin for Children & Families Agcy for Hith Care Policy & Rsch Centers for Disease Control &	6,854,037 9,874 37,020	6,094,445 0 28,272	271,329 0 2,024	101,409 0 0	18,133 0 0	22,627 0 1,808	50,368 0 0	72,852 9,874 2,995	222,874 0 1,921
PreventionFood & Drug Administration	61,368 14,155	61,368 14,155	0 0	0 0	0 0	0 0	0 0	0 0	0
Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,  Planning & Evaluation	5,329 7,529 6,715,863 2,899 2,899	5,329 7,529 5,977,792 0	0 0 269,305 0	0 0 101,409 0	0 0 18,133 0	0 0 20,819 0	0 0 50,368 0	0 0 57,084 2,899 2,899	0 0 220,953 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	647,500 1,874,860	50,446 321,160	5,755 4,218	261,719 382,584	184,945 295,984	21,602 325,509	92,225 383,074	299 72,852	30,509 89,479

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-58. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	12,763,933	8,161,258	337,571	1,255,084	688,645	677,743	1,034,969	215,831	392,832
Departments:									
Department of Agriculture, total	529,192 41,434	432,228 36,628	0	20,954 3,880	2,429 212	595 59	19,469 655	53,517 0	0
Education, & Extension Service Economic Research Service Foreign Agricultural Service	461,648 9,069 451	383,244 0 451	0 0 0	17,074 0 0	1,091 0 0	0 0 0	18,637 0 0	41,602 9,069 0	0 0 0
Forest Service Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	15,610 180 800	11,905 0 0	0 0 0	0 0 0	1,126 0 0	356 180 0	177 0 0	2,046 0 800	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,025,537 101,437 135,682 243,414 545,004	187,736 8,907 71,415 15,293 92,121	12,510 192 1,153 8,810 2,355	99,458 14,529 11,372 31,906 41,651	91,404 70 8,379 73,541 9,414	254,449 23,264 8,162 15,366 207,657	377,897 54,475 35,201 98,498 189,723	0 0 0 0	2,083 0 0 0 2,083
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	4,304 284,136	0 21,266	0 0	1,471 10,202	0 0	0 185,930	2,833 66,738	0	0
Agency <sup>1</sup>	2,208 897 253,459	0 0 70,855	0 0 2,355	0 0 29,978	0 0 9,414	0 0 21,727	144 878 119,130	0 0 0	2,064 19 0
Department of Energy	565,628	79,869	0	334,627	62,990	17,067	68,107	0	2,968
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hith Care Policy & Rsch Centers for Disease Control &	7,936,304 600 9,549 33,957	7,058,229 0 0 26,147	314,440 0 0 1,698	117,765 0 0 0	21,057 0 0 0	25,876 0 0 1,698	58,492 0 0 0	82,156 600 9,549 2,716	258,289 0 0 1,698
Prevention	61,368	61,368	0	0	0	0	0	0	0
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,  Planning & Evaluation	14,000 7,000 7,755 7,799,075 3,000	14,000 7,000 7,755 6,941,959 0	0 0 0 312,742 0	0 0 0 117,765 0	0 0 0 21,057 0	0 0 0 24,178 0	0 0 0 58,492 0	0 0 0 66,291 3,000	0 0 0 256,591 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	647,500 2,059,772	50,222 352,974	5,979 4,642	261,719 420,561	184,945 325,820	21,602 358,154	91,301 419,703	299 79,859	31,433 98,059

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-59. Preliminary Federal obligations for research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 2000

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	13,018,477	8,178,591	355,757	1,301,418	728,730	745,402	1,085,836	219,076	403,667
Departments:									
Department of Agriculture, total	468,349 34,393	382,321 30,404	0	19,159 3,220	2,258 176	585 49	19,493 544	44,533 0	0
Education, & Extension Service Economic Research Service Foreign Agricultural Service	411,675 5,040 451	339,561 0 451	0 0 0	15,939 0 0	956 0 0	0 0 0	18,772 0 0	36,447 5,040 0	0 0 0
Forest Service Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	15,610 180 1,000	11,905 0 0	0 0 0	0 0 0	1,126 0 0	356 180 0	177 0 0	2,046 0 1,000	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	1,032,019 106,097 83,693 254,342 587,887	126,551 10,078 22,205 16,379 77,889	24,466 145 1,650 9,550 13,121	105,550 17,023 10,651 35,086 42,790	95,634 0 6,831 77,207 11,596	285,121 28,328 9,762 16,761 230,270	392,384 50,523 32,594 99,359 209,908	0 0 0 0	2,313 0 0 0 2,313
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	3,810 308,766	0 23,069	0 0	1,400 11,067	0	80 201,868	2,330 72,762	0	0
Agency <sup>1</sup>	2,456 834 272,021	0 0 54,820	0 0 13,121	0 0 30,323	0 0 11,596	0 0 28,322	160 817 133,839	0 0 0	2,296 17 0
Department of Energy	575,023	57,459	0	342,812	73,427	25,938	75,387	0	0
Dept of Health & Human Svcs, total	8,081,497 500 14,671 37,793	7,182,722 0 0 29,100	320,031 0 0 1,890	119,798 0 0 0	21,421 0 0 0	26,484 0 0 1,890	59,502 0 0 0	88,629 500 14,671 3,023	262,910 0 0 1,890
Prevention	61,368	61,368	0	0	0	0	0	0	0
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,  Planning & Evaluation	15,000 7,700 7,755 7,933,710 3,000	15,000 7,700 7,755 7,061,799 0	0 0 0 318,141 0	0 0 0 119,798 0	0 0 0 21,421 0	0 0 0 24,594 0	0 0 0 59,502 0	0 0 0 67,435 3,000 3,000	0 0 0 261,020 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	647,500 2,214,089	49,943 379,595	6,258 5,002	261,719 452,380	184,945 351,045	21,602 385,672	89,382 449,688	299 85,615	33,352 105,092

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 97 percent of total Federal research obligations to universities and colleges in fiscal year 2000.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-60. Federal obligations for research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field of science: fiscal year 1998

## [Dollars in thousands]

		Psych	iology				Life sc	iences		
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	297,318	23,104	11,891	262,323	7,005,369	3,739,058	158,273	171,963	2,714,380	221,695
Departments:										
Department of Agriculture, total	0	0	0	0	329,627	72,113	77,876	171,018	8,620	0
	0	0	0	0	274	0	0	274	0	0
	0	0	0	0	30,662	1,986	3,608	24,501	567	0
Cooperative State Research, Education, & Extension Service Foreign Agricultural Service Forest Service	0	0	0	0	286,335	62,897	69,593	145,792	8,053	0
	0	0	0	0	451	0	0	451	0	0
	0	0	0	0	11,905	7,230	4,675	0	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	16,016	12,741	2,320	955	130,862	65,677	4,927	538	58,724	996
	318	0	306	12	7,352	6,680	0	0	672	0
	1,475	0	1,475	0	38,532	2,544	0	0	35,964	24
	11,413	10,470	0	943	16,358	5,653	4,522	0	5,211	972
	2,810	2,271	539	0	68,620	50,800	405	538	16,877	0
Defense Adv Rsch Projects Agcy	0	0	0	0	18,798	17,098	0	0	1,700	0
Washington Headquarters Svcs	2,810	2,271	539	0	49,822	33,702	405	538	15,177	0
Department of Energy	0	0	0	0	78,829	45,506	0	0	33,168	155
Dept of Health & Human Svcs, total Agcy for HIth Care Policy & Rsch Centers for Disease Control &	271,329 2,024	10,336 0	4,517 110	256,476 1,914	6,094,445 28,272	3,291,571 0	0 0	0	2,608,277 27,668	194,597 604
Prevention	0	0	0	0	61,368	0	0	0	61,368	0
	0	0	0	0	14,155	14,155	0	0	0	0
	0	0	0	0	5,329	0	0	0	0	5,329
Health Resources & Services Admin	0	0	0	0	7,529	0	0	0	7,529	0
National Institutes of Health	269,305	10,336	4,407	254,562	5,977,792	3,277,416	0	0	2,511,712	188,664
Other agencies:										
National Aeronautics & Space Admin	5,755	27	836	4,892	50,446	16,866	1,635	407	5,591	25,947
National Science Foundation	4,218	0	4,218	0	321,160	247,325	73,835	0	0	0

NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-61. Federal obligations for research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field of science: fiscal year 1998

## [Dollars in thousands]

		Ph	ysical scie	ences			Enviro	onmental so	ciences	
Agency and subdivision	Total	Astrono- my	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	1,204,162	173,413	331,412	577,136	122,201	652,837	165,621	171,408	197,197	118,611
Departments:  Department of Agriculture, totalAgricultural Research Service Cooperative State Research,	17,670 3,261	0	17,500 3,091	170 170	0	2,294 178	1,964 173	330 5	0	0
Education, & Extension Service Forest Service	14,409 0	0 0	14,409	0	0	990 1,126	990 801	0 325	0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	108,535 23,798 11,850 22,261 50,626	6,270 0 0 0 6,270	38,629 8,295 5,690 10,039 14,605	54,169 15,503 5,485 7,700 25,481	9,467 0 675 4,522 4,270	87,057 125 11,568 60,437 14,927	19,684 0 5,738 9,193 4,753	5,085 0 1,261 2,827 997	46,231 0 0 37,414 8,817	16,057 125 4,569 11,003 360
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	1,044 9,018 40,564	0 0 6,270	1,044 0 13,561	0 4,748 20,733	0 4,270 0	0 100 14,827	0 0 4,753	0 0 997	0 100 8,717	0 0 360
Department of Energy	332,245	0	44,287	287,278	680	64,424	20,550	26,332	1,928	15,614
Dept of Health & Human Svcs, total National Institutes of Health	101,409 101,409	0 0	97,933 97,933	3,476 3,476	0 0	18,133 18,133	0 0	0 0	0 0	18,133 18,133
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	261,719 382,584	128,219 38,924	10,367 122,696	104,588 127,455	18,545 93,509	184,945 295,984	56,821 66,602	60,802 78,859	9,094 139,944	58,228 10,579

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-62. Federal obligations for research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1998

## [Dollars in thousands]

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	993,735	62,107	8,819	73,351	47,407	177,287	76,403	246,636	301,725
Departments:									
Department of Agriculture, totalAgricultural Research Service Cooperative State Research,	14,416 554	0	0	297 297	85 85	29 29	34 34	0	13,971 109
Education, & Extension Service Forest Service	13,685 177	0 0	0 0	0 0	0	0 0	0 0	0 0	13,685 177
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	375,916 37,006 35,673 97,503 205,734	26,116 15,549 3,399 2,974 4,194	1,901 1,014 12 0 875	10,419 0 1,397 358 8,664	5,135 250 2,684 0 2,201	125,486 12,161 11,741 25,837 75,747	48,390 3,178 6,653 15,009 23,550	107,612 3,669 8,163 25,226 70,554	50,857 1,185 1,624 28,099 19,949
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	5,822 66,218	0 1,930	0	0 50	0	2,322 19,782	0	2,884 27,006	616 17,450
Agency <sup>1</sup> Special Operations Command Washington Headquarters Svcs	157 1,196 132,341	0 0 2,264	0 0 875	0 0 8,614	0 0 2,201	0 0 53,643	0 0 23,550	0 0 40,664	157 1,196 530
Department of Energy	77,736	0	0	20,968	5,536	3,605	10,470	18,904	18,253
Dept of Health & Human Svcs, total National Institutes of Health	50,368 50,368	0 0	0	0	0	0	0	0 0	50,368 50,368
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	92,225 383,074	35,991 0	6,918 0	1,812 39,855	0 36,651	8,200 39,967	9,415 8,094	14,327 105,793	15,562 152,714

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-63. Federal obligations for research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field of science: fiscal year 1998

## [Dollars in thousands]

	Mathe	matics and	computer s	ciences			Social	sciences		
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	624,106	132,516	470,433	21,157	189,508	10,733	48,465	5,077	13,846	111,387
Departments:										
Department of Agriculture, total	610 49	610 49	0 0	0	43,505 0	0 0	34,952 0	0	8,553 0	0
Education, & Extension Service Economic Research Service Forest Service	0 0 356	0 0 356	0 0 0	0 0 0	34,578 4,961 2,046	0 0 0	26,353 4,961 1,718	0 0 0	8,225 0 328	0 0 0
Nat'l Agricultural Statistics SvcRural Business-Cooperative Svc	205 0	205 0	0 0	0	0 1,920	0 0	0 1,920	0	0 0	0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	243,865 17,123 9,804 17,901 199,037	29,183 166 2,771 7,915 18,331	198,192 1,069 6,646 9,986 180,491	16,490 15,888 387 0 215	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	215 167,740 31,082	0 8,664 9,667	0 159,076 21,415	215 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Department of Energy	9,893	7,280	2,613	0	0	0	0	0	0	0
Dept of Health & Human Svcs, total Admin for Children & Families Agcy for Hith Care Policy & Rsch National Institutes of Health Office of the Secretary, total Office of the Asst Secretary, Planning & Evaluation	22,627 0 1,808 20,819 0	10,301 0 308 9,993 0	12,326 0 1,500 10,826 0	0 0 0 0	72,852 9,874 2,995 57,084 2,899	0 0 0 0 0	456 0 456 0 0	0 0 0 0	921 0 921 0 0	71,475 9,874 1,618 57,084 2,899
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	21,602 325,509	816 84,326	16,119 241,183	4,667 0	299 72,852	0 10,733	0 13,057	0 5,077	162 4,210	137 39,775

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The research obligations of the six agencies included in this table represent approximately 96 percent of total Federal research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-64. Federal obligations for basic research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

#### [Dollars in thousands]

Field of science and engineering	1998	Prelimi	nary
. Total of colonial and onguinosing	.000	1999	2000
Total, all fields	7,908,413	8,880,819	9,181,68
Life sciences, total	4,571,071	5,328,548	5,415,33
Biological (excluding environmental)	2,545,590	NA	N/
Environmental biology	97,824	NA	N/
Agricultural	83,923	NA	N.
Medical	1,701,561	NA	N.
Life sciences, n.e.c.	142,173	NA	N.
Psychology, total	200,953	228,309	243,14
Biological aspects	18,301	NA	N
Social aspects	8,872	NA	N
Psychological sciences, n.e.c.	173,780	NA	N
Physical sciences, total	1,011,650	1,054,295	1,099,47
Astronomy	148,197	NA	, saa, N
Chemistry	273,252	NA	N
Physics '	480,058	NA	N
Physical sciences, n.e.c.	110,143	NA	N
Environmental sciences, total	603,157	634,699	677,86
Atmospheric	154,124	NA	N
Geological	170,002	NA	N
Oceanography	186,390	NA	N
Environmental sciences, n.e.c.	92,641	NA	N
Mathematics & computer sciences, total	438,490	474,380	521,07
Mathematics	117,547	NA	N
Computer sciences	301,055	NA	N
Mathematics & computer sciences, n.e.c	19,888	NA	N
Engineering, total	722,362	751,941	797,85
Aeronautical	42,289	NA	N
Astronautical	4,920	NA	N
Chemical	45,072	NA	N
Civil	25,340	NA	N
Electrical	141,701	NA	N
Mechanical	68,584	NA	N
Metallurgy & materials	203,573	NA	N
Engineering, n.e.c.	190,883	NA	N
Social sciences, total	111,963	126,843	132,43
Anthropology	10,157	NA	N
Economics	17,294	NA	N
Political science	4,546	NA	N
Sociology	5,781	NA	N
Social sciences, n.e.c.	74,185	NA	N
Other sciences, n.e.c.	248,767	281,804	294,51

### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal years 1998, 1999, and 2000.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

= Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year) KEY: NA

= Not elsewhere classified

# Table C-65. Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	7,908,413	4,571,071	200,953	1,011,650	603,157	438,490	722,362	111,963	248,767
Departments:									
Department of Agriculture, total	173,716 20,212	153,557 18,231	0	7,272 1,648	882 94	122 32	3,223 207	8,660 0	0
Education, & Extension Service Foreign Agricultural Service Forest Service	149,481 203 3,820	132,218 203 2,905	0 0 0	5,624 0 0	503 0 285	0 0 90	2,972 0 44	8,164 0 496	0 0 0
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	546,477 68,477 58,001 157,677 262,322	51,746 7,352 6,032 14,320 24,042	13,831 0 1,357 10,742 1,732	89,702 19,310 11,423 22,099 36,870	62,672 0 2,815 46,108 13,749	78,900 15,767 8,528 17,149 37,456	249,626 26,048 27,846 47,259 148,473	0 0 0 0	0 0 0 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	29,507 232,815	0 24,042	0 1,732	0 36,870	0 13,749	9,608 27,848	19,899 128,574	0 0	0
Department of Energy	449,065	45,661	0	300,550	60,553	9,893	32,403	0	5
Dept of Health & Human Svcs, total	4,467,813 4,467,813	3,976,802 3,976,802	179,159 179,159	67,464 67,464	12,063 12,063	13,850 13,850	33,508 33,508	37,976 37,976	146,991 146,991
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	495,494 1,775,848	36,015 307,290	3,763 4,200	178,838 367,824	172,307 294,680	15,367 320,358	66,396 337,206	299 65,028	22,509 79,262

NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-66. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	8,880,819	5,328,548	228,309	1,054,295	634,699	474,380	751,941	126,843	281,804
Departments:									
Department of Agriculture, total	238,783 24,587	213,384 22,177	0 0	8,974 2,005	980 114	129 39	4,528 252	10,788 0	0
Education, & Extension Service Foreign Agricultural Service Forest Service	210,173 203 3,820	188,099 203 2,905	0 0 0	6,969 0 0	581 0 285	0 0 90	4,232 0 44	10,292 0 496	0 0 0
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	547,628 85,250 53,645 163,638 245,095	70,787 8,907 6,449 12,616 42,815	11,363 0 1,072 7,936 2,355	82,218 11,105 11,009 31,697 28,407	63,660 0 2,635 51,611 9,414	72,998 22,180 7,702 14,466 28,650	246,602 43,058 24,778 45,312 133,454	0 0 0 0	0 0 0 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	21,261 223,834	0 42,815	0 2,355	0 28,407	0 9,414	6,923 21,727	14,338 119,116	0	0 0
Department of Energy	448,316	45,839	0	300,842	59,282	17,067	25,286	0	0
Dept of Health & Human Svcs, total	5,195,393 5,195,393	4,624,421 4,624,421	208,335 208,335	78,450 78,450	14,027 14,027	16,106 16,106	38,965 38,965	44,160 44,160	170,929 170,929
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	495,494 1,955,205	35,791 338,326	3,987 4,624	178,838 404,973	172,307 324,443	15,367 352,713	65,297 371,263	299 71,596	23,608 87,267

NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-67. Preliminary Federal obligations for basic research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 2000

## [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	9,181,684	5,415,331	243,146	1,099,474	677,861	521,070	797,857	132,434	294,511
Departments:									
Department of Agriculture, total	226,804 20,409	202,307 18,409	0 0	8,571 1,664	920 95	122 32	4,779 209	10,105 0	0
Education, & Extension Service Foreign Agricultural Service Forest Service	202,372 203 3,820	180,790 203 2,905	0 0 0	6,907 0 0	540 0 285	0 0 90	4,526 0 44	9,609 0 496	0 0 0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	597,316 92,738 55,166 180,136 269,276	70,403 10,028 6,706 13,888 39,781	22,189 0 1,549 8,737 11,903	88,521 14,544 10,330 34,892 28,755	71,003 0 3,810 56,815 10,378	83,176 27,550 7,344 15,924 32,358	262,024 40,616 25,427 49,880 146,101	0 0 0 0	0 0 0 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	23,605 245,671	0 39,781	0 11,903	0 28,755	0 10,378	7,686 24,672	15,919 130,182	0 0	0 0
Department of Energy	475,533	43,215	0	307,405	69,742	25,938	29,233	0	0
Dept of Health & Human Svcs, total	5,279,513 5,279,513	4,699,297 4,699,297	211,708 211,708	79,720 79,720	14,254 14,254	16,366 16,366	39,596 39,596	44,875 44,875	173,697 173,697
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	495,494 2,107,024	35,512 364,597	4,266 4,983	178,838 436,419	172,307 349,635	15,367 380,101	62,134 400,091	299 77,155	26,771 94,043

#### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 2000.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-68. Federal obligations for basic research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field of science: fiscal year 1998

## [Dollars in thousands]

		Psych	nology		Life sciences					
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psycho- logical sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	200,953	18,301	8,872	173,780	4,571,071	2,545,590	97,824	83,923	1,701,561	142,173
Departments:										
Department of Agriculture, total	0 0	0 0	0 0	0 0	153,557 18,231	38,946 1,559	26,661 1,485	83,516 14,782	4,434 405	0
Education, & Extension Service Foreign Agricultural Service Forest Service	0 0 0	0 0 0	0 0 0	0 0 0	132,218 203 2,905	35,617 0 1,770	24,041 0 1,135	68,531 203 0	4,029 0 0	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total Washington Headquarters Svcs	13,831 0 1,357 10,742 1,732 1,732	11,531 0 0 9,799 1,732 1,732	1,357 0 1,357 0 0 0	943 0 0 943 0 0	51,746 7,352 6,032 14,320 24,042 24,042	24,760 6,680 2,248 5,653 10,179 10,179	4,927 0 0 4,522 405 405	0 0 0 0 0	22,035 672 3,760 4,145 13,458 13,458	0 24 0 0
Department of Energy	0	0	0	0	45,661	45,506	0	0	0	155
Dept of Health & Human Svcs, total National Institutes of Health	179,159 179,159	6,743 6,743	2,868 2,868	169,548 169,548	3,976,802 3,976,802	2,180,342 2,180,342	0	0	1,670,948 1,670,948	125,512 125,512
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	3,763 4,200	27 0	447 4,200	3,289 0	36,015 307,290	14,003 242,033	979 65,257	407 0	4,144 0	16,482 0

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-69. Federal obligations for basic research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field of science: fiscal year 1998

## [Dollars in thousands]

		Ph	ysical scier	nces			Enviro	onmental so	ciences	
Agency and subdivision	Total	Astrono- my	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies  Departments:	1,011,650	148,197	273,252	480,058	110,143	603,157	154,124	170,002	186,390	92,641
Department of Agriculture, total	7,272 1,648	0 0	7,193 1,569	79 79	0	882 94	800 92	82 2	0 0	0 0
Education, & Extension Service Forest Service	5,624 0	0	5,624 0	0 0	0 0	503 285	503 205	0 80	0 0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total Washington Headquarters Svcs	89,702 19,310 11,423 22,099 36,870 36,870	6,270 0 0 0 6,270 6,270	33,816 8,066 5,305 10,039 10,406 10,406	44,419 11,244 5,443 7,538 20,194 20,194	5,197 0 675 4,522 0 0	62,672 0 2,815 46,108 13,749 13,749	13,990 0 1,304 8,292 4,394 4,394	4,953 0 1,129 2,827 997 997	36,249 0 0 27,891 8,358 8,358	7,480 0 382 7,098 0
Department of Energy	300,550	0	39,621	260,929	0	60,553	20,550	26,332	1,928	11,743
Dept of Health & Human Svcs, total National Institutes of Health	67,464 67,464	0 0	65,152 65,152	2,312 2,312	0 0	12,063 12,063	0 0	0 0	0 0	12,063 12,063
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	178,838 367,824	103,004 38,923	9,858 117,612	49,400 122,919	16,576 88,370	172,307 294,680	52,234 66,550	60,343 78,292	8,848 139,365	50,882 10,473

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-70. Federal obligations for basic research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1998

## [Dollars in thousands]

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	722,362	42,289	4,920	45,072	25,340	141,701	68,584	203,573	190,883
Departments:									
Department of Agriculture, total	3,223 207	0 0	0	106 106	34 34	20 20	13 13	0	3,050 34
Education, & Extension Service Forest Service	2,972 44	0	0	0	0 0	0	0	0	2,972 44
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	249,626 26,048 27,846 47,259 148,473	15,563 9,951 3,348 0 2,264	1,889 1,014 0 0 875	8,960 0 1,151 0 7,809	2,854 0 1,458 0 1,396	96,658 8,433 9,757 11,372 67,096	42,956 3,000 4,396 12,815 22,745		10,510 1,007 0 9,503 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	19,899 128,574	0 2,264	0 875	7,809	0 1,396	14,275 52,821	0 22,745	5,624 40,664	0 0
Department of Energy	32,403	0	0	3,336	0	0	10,438	18,629	0
Dept of Health & Human Svcs, total National Institutes of Health	33,508 33,508	0	0	0	0	0	0	0	33,508 33,508
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	66,396 337,206	26,726 0	3,031 0	1,465 31,205	0 22,452	5,506 39,517	8,079 7,098	12,786 101,922	8,803 135,012

NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-71. Federal obligations for basic research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

	Mathe	matics and	computer s	ciences			Social	sciences		
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	438,490	117,547	301,055	19,888	111,963	10,157	17,294	4,546	5,781	74,185
Departments:										
Department of Agriculture, total	122 32	122 32	0 0	0 0	8,660 0	0 0	6,477 0	0	2,183 0	0 0
Education, & Extension Service Forest Service	0 90	0 90	0 0	0	8,164 496	0 0	6,061 416	0	2,103 80	0 0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	78,900 15,767 8,528 17,149 37,456	18,651 0 2,686 7,915 8,050	44,227 0 5,587 9,234 29,406	16,022 15,767 255 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	9,608 27,848	0 8,050	9,608 19,798	0	0 0	0 0	0 0	0 0	0	0 0
Department of Energy	9,893	7,280	2,613	0	0	0	0	О	0	0
Dept of Health & Human Svcs, total  National Institutes of Health	13,850 13,850	6,648 6,648	7,202 7,202	0	37,976 37,976	0 0	0 0	0	0 0	37,976 37,976
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	15,367 320,358	716 84,130	10,785 236,228	3,866 0	299 65,028	0 10,157	0 10,817	0 4,546	162 3,436	137 36,072

NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The basic research obligations of the six agencies included in this table represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

### Table C-72. Federal obligations for applied research performed at universities and colleges for selected agencies, by detailed field of science and engineering: fiscal years 1998, 1999, and 2000

#### [Dollars in thousands]

Field of science and engineering	1998	Prelimina	ary
r ou or outstoo und onginoomig		1999	2000
Total, all fields	3,404,331	3,883,114	3,836,793
Life sciences, total Biological (excluding environmental) Environmental biology Agricultural Medical Life sciences, n.e.c.	2,434,298 1,193,468 60,449 88,040 1,012,819 79,522	2,832,710 NA NA NA NA NA	2,763,260 NA NA NA NA
Psychology, total Biological aspects Social aspects Psychological sciences, n.e.c.	96,365	109,262	112,611
	4,803	NA	NA
	3,019	NA	NA
	88,543	NA	NA
Physical sciences, total  Astronomy Chemistry Physics Physical sciences, n.e.c.	192,512	200,789	201,944
	25,216	NA	NA
	58,160	NA	NA
	97,078	NA	NA
	12,058	NA	NA
Environmental sciences, total Atmospheric Geological Oceanography Environmental sciences, n.e.c.	49,680	53,946	50,869
	11,497	NA	NA
	1,406	NA	NA
	10,807	NA	NA
	25,970	NA	NA
Mathematics & computer sciences, total	185,616	203,363	224,332
	14,969	NA	NA
	169,378	NA	NA
	1,269	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	271,373	283,028	287,979
	19,818	NA	NA
	3,899	NA	NA
	28,279	NA	NA
	22,067	NA	NA
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	35,586	NA	NA
	7,819	NA	NA
	43,063	NA	NA
	110,842	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	77,545 576 31,171 531 8,065 37,202	88,988 NA NA NA NA	86,642 NA NA NA NA
Other sciences, n.e.c.	96,942	111,028	109,156

#### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 91 percent of total Federal applied research obligations to universities and colleges in fiscal years 1998, 1999, and 2000.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A.

= Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year) KEY: NA

= Not elsewhere classified

## Table C-73. Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1998

#### [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,404,331	2,434,298	96,365	192,512	49,680	185,616	271,373	77,545	96,942
Departments:									
Department of Agriculture, total	234,406 274 14,492	176,070 274 12,431	0 0 0	10,398 0 1,613	1,412 0 84	488 0 17	11,193 0 347	34,845 0 0	0 0 0
Education, & Extension Service Economic Research Service	200,516 4,961	154,117 0	0 0	8,785 0	487 0	0 0	10,713 0	26,414 4,961	0 0
Foreign Agricultural Service	248 11,790 205 1,920	248 9,000 0 0	0 0 0	0 0 0	0 841 0 0	0 266 205 0	0 133 0 0	0 1,550 0 1,920	0 0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	418,212 17,245 50,915 68,196 281,856	79,116 0 32,500 2,038 44,578	2,185 318 118 671 1,078	18,833 4,488 427 162 13,756	24,385 125 8,753 14,329 1,178	164,965 1,356 1,276 752 161,581	126,290 10,958 7,827 50,244 57,261	0 0 0 0	2,438 0 14 0 2,424
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	7,081 232,367	0 18,798	0 0	1,044 9,018	0 100	215 158,132	5,822 46,319	0	0
Agency <sup>1</sup> Special Operations Command	2,414 1,363 38,631	0 0 25,780	0 0 1,078	0 0 3,694	0 0 1,078	0 0 3,234	157 1,196 3,767	0 0 0	2,257 167 0
Department of Energy	114,471	33,168	0	31,695	3,871	0	45,333	0	404
Dept of Health & Human Svcs, total Admin for Children & Families	2,386,224 9,874 37,020	2,117,643 0 28,272	92,170 0 2,024	33,945 0 0	6,070 0 0	8,777 0 1,808	16,860 0 0	34,876 9,874 2,995	75,883 0 1,921
PreventionFood & Drug Administration	61,368 14,155	61,368 14,155	0 0	0 0	0	0 0	0 0	0	0 0
Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary, Planning & Evaluation	5,329 7,529 2,248,050 2,899 2,899	5,329 7,529 2,000,990 0	0 0 90,146 0	0 0 33,945 0	0 0 6,070 0	0 0 6,969 0	0 0 16,860 0	0 0 19,108 2,899	73,962 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	152,006 99,012	14,431 13,870	1,992 18	82,881 14,760	12,638 1,304	6,235 5,151	25,829 45,868	0 7,824	8,000 10,217

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

#### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

## Table C-74. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 1999

#### [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,883,114	2,832,710	109,262	200,789	53,946	203,363	283,028	88,988	111,028
Departments:									
Department of Agriculture, total	290,409 16,847	218,844 14,451	0	11,980 1,875	1,449 98	466 20	14,941 403	42,729 0	0
Education, & Extension Service Economic Research Service Foreign Agricultural Service	251,475 9,069 248	195,145 0 248	0 0 0	10,105 0 0	510 0 0	0 0 0	14,405 0 0	31,310 9,069 0	0 0 0
Forest Service Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	11,790 180 800	9,000 0 0	0 0 0	0 0 0	841 0 0	266 180 0	133 0 0	1,550 0 800	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	477,909 16,187 82,037 79,776 299,909	116,949 0 64,966 2,677 49,306	1,147 192 81 874 0	17,240 3,424 363 209 13,244	27,744 70 5,744 21,930 0	181,451 1,084 460 900 179,007	131,295 11,417 10,423 53,186 56,269	0 0 0 0	2,083 0 0 0 2,083
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	4,304 262,875	0 21,266	0 0	1,471 10,202	0	0 179,007	2,833 52,400	0	0
Agency 1	2,208 897 29,625	0 0 28,040	0 0 0	0 0 1,571	0 0 0	0 0 0	144 878 14	0 0 0	2,064 19 0
Department of Energy	117,312	34,030	0	33,785	3,708	0	42,821	0	2,968
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hith Care Policy & Rsch Centers for Disease Control &	2,740,911 600 9,549 33,957	2,433,808 0 0 26,147	106,105 0 0 1,698	39,315 0 0 0	7,030 0 0 0	9,770 0 0 1,698	19,527 0 0 0	37,996 600 9,549 2,716	87,360 0 0 1,698
Prevention	61,368	61,368	0	0	0	0	0	0	0
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,  Planning & Evaluation	14,000 7,000 7,755 2,603,682 3,000	14,000 7,000 7,755 2,317,538 0	0 0 0 104,407 0	0 0 0 39,315 0	0 0 0 7,030 0	0 0 0 8,072 0	0 0 0 19,527 0	0 0 0 22,131 3,000 3,000	0 0 0 85,662 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	152,006 104,567	14,431 14,648	1,992 18	82,881 15,588	12,638 1,377	6,235 5,441	26,004 48,440	0 8,263	7,825 10,792

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency

#### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 91 percent of total Federal applied research obligations to universities and colleges in fiscal year 1999.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

## Table C-75. Preliminary Federal obligations for applied research performed at universities and colleges, by selected agency and field of science and engineering: fiscal year 2000

#### [Dollars in thousands]

Agency and subdivision	Total	Life sciences	Psy- chology	Physical sciences	Environ- mental sciences	Mathe- matics and com- puter sciences	Engi- neering	Social sciences	Other sciences, n.e.c.
Total, all agencies	3,836,793	2,763,260	112,611	201,944	50,869	224,332	287,979	86,642	109,156
Departments:									
Department of Agriculture, total	241,545 13,984	180,014 11,995	0	10,588 1,556	1,338 81	463 17	14,714 335	34,428 0	0
Education, & Extension Service Economic Research Service Foreign Agricultural Service	209,303 5,040 248	158,771 0 248	0 0 0	9,032 0 0	416 0 0	0 0 0	14,246 0 0	26,838 5,040 0	0 0 0
Forest Service	11,790 180 1,000	9,000 0 0	0 0 0	0 0 0	841 0 0	266 180 0	133 0 0	1,550 0 1,000	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	434,703 13,359 28,527 74,206 318,611	56,148 50 15,499 2,491 38,108	2,277 145 101 813 1,218	17,029 2,479 321 194 14,035	24,631 0 3,021 20,392 1,218	201,945 778 2,418 837 197,912	130,360 9,907 7,167 49,479 63,807	0 0 0 0	2,313 0 0 0 2,313
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	3,810 285,161	0 23,069	0 0	1,400 11,067	0 0	80 194,182	2,330 56,843	0	0
Agency 1	2,456 834 26,350	0 0 15,039	0 0 1,218	0 0 1,568	0 0 1,218	0 0 3,650	160 817 3,657	0 0 0	2,296 17 0
Department of Energy	99,490	14,244	0	35,407	3,685	0	46,154	0	0
Dept of Health & Human Svcs, total	2,801,984 500 14,671 37,793	2,483,425 0 0 29,100	108,323 0 0 1,890	40,078 0 0 0	7,167 0 0 0	10,118 0 0 1,890	19,906 0 0 0	43,754 500 14,671 3,023	89,213 0 0 1,890
Prevention	61,368	61,368	0	0	0	0	0	0	0
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total  Office of the Asst Secretary,  Planning & Evaluation	15,000 7,700 7,755 2,654,197 3,000 3,000	15,000 7,700 7,755 2,362,502 0	0 0 0 106,433 0	0 0 0 40,078 0	0 0 7,167 0	0 0 0 8,228 0	0 0 0 19,906 0	0 0 22,560 3,000	0 0 0 87,323 0
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	152,006 107,065	14,431 14,998	1,992 19	82,881 15,961	12,638 1,410	6,235 5,571	27,248 49,597	0 8,460	6,581 11,049

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

#### NOTES:

Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 91 percent of total Federal applied research obligations to universities and colleges in fiscal year 2000.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-76. Federal obligations for applied research performed at universities and colleges in psychology and life sciences, by selected agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

		Psych	ology				Life sc	iences		
Agency and subdivision	Total	Bio- logical aspects	Social aspects	Psychological sciences, n.e.c.	Total	Bio- logical	Environ- mental biology	Agri- cultural	Medical	Life sciences, n.e.c.
Total, all agencies	96,365	4,803	3,019	88,543	2,434,298	1,193,468	60,449	88,040	1,012,819	79,522
Departments:										
Department of Agriculture, total	0 0 0	0 0 0	0 0 0	0 0 0	176,070 274 12,431	33,167 0 427	51,215 0 2,123	87,502 274 9,719	4,186 0 162	0 0 0
Cooperative State Research, Education, & Extension Service Foreign Agricultural Service Forest Service	0 0 0	0 0 0	0 0 0	0 0 0	154,117 248 9,000	27,280 0 5,460	45,552 0 3,540	77,261 248 0	4,024 0 0	0 0 0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	2,185 318 118 671 1,078	1,210 0 0 671 539	963 306 118 0 539	12 12 0 0 0	79,116 0 32,500 2,038 44,578	40,917 0 296 0 40,621	0 0 0 0	538 0 0 0 538	36,689 0 32,204 1,066 3,419	972 0 0 972 0
Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	0 1,078	0 539	0 539	0 0	18,798 25,780	17,098 23,523	0 0	0 538	1,700 1,719	0 0
Department of Energy	0	0	0	0	33,168	0	0	0	33,168	0
Dept of Health & Human Svcs, total Agcy for Hith Care Policy & Rsch Centers for Disease Control &	92,170 2,024	3,593 0	1,649 110	86,928 1,914	2,117,643 28,272	1,111,229 0	0 0	0	937,329 27,668	69,085 604
Prevention	0 0 0	0 0 0	0 0 0	0 0 0	61,368 14,155 5,329	0 14,155 0	0 0 0	0 0 0	61,368 0 0	0 0 5,329
Health Resources & Services Admin National Institutes of Health	0 90,146	0 3,593	0 1,539	0 85,014	7,529 2,000,990	0 1,097,074	0 0	0 0	7,529 840,764	0 63,152
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	1,992 18	0 0	389 18	1,603 0	14,431 13,870	2,863 5,292	656 8,578	0 0	1,447 0	9,465 0

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-77. Federal obligations for applied research performed at universities and colleges in physical and environmental sciences, by selected agency and detailed field of science: fiscal year 1998

#### [Dollars in thousands]

		Ph	ysical scier	nces			Enviro	onmental so	ciences	
Agency and subdivision	Total	Astrono- my	Chem- istry	Physics	Physical sciences, n.e.c.	Total	Atmos- pheric	Geo- logical	Ocean- ography	Environ- mental sciences, n.e.c.
Total, all agencies	192,512	25,216	58,160	97,078	12,058	49,680	11,497	1,406	10,807	25,970
Departments:										
Department of Agriculture, total	10,398 1,613	0	10,307 1,522	91 91	0	1,412 84	1,164 81	248 3	0 0	0
Education, & Extension Service	8,785 0	0 0	8,785 0	0 0	0	487 841	487 596	0 245	0 0	0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	18,833 4,488 427 162 13,756	0 0 0 0	4,813 229 385 0 4,199	9,750 4,259 42 162 5,287	4,270 0 0 0 4,270	24,385 125 8,753 14,329 1,178	5,694 0 4,434 901 359	132 0 132 0 0	9,982 0 0 9,523 459	8,577 125 4,187 3,905 360
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	1,044 9,018 3,694	0 0 0	1,044 0 3,155	0 4,748 539	4,270 0	0 100 1,078	0 0 359	0 0 0	0 100 359	0 0 360
Department of Energy	31,695	0	4,666	26,349	680	3,871	0	0	0	3,871
Dept of Health & Human Svcs, total National Institutes of Health	33,945 33,945	0	32,781 32,781	1,164 1,164	0 0	6,070 6,070	0 0	0 0	0 0	6,070 6,070
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	82,881 14,760	25,215 1	509 5,084	55,188 4,536	1,969 5,139	12,638 1,304	4,587 52	459 567	246 579	7,346 106

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

## Table C-78. Federal obligations for applied research performed at universities and colleges in engineering, by selected agency and detailed field of engineering: fiscal year 1998

#### [Dollars in thousands]

Agency and subdivision	Total	Aero- nautical	Astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgy and materials	Engi- neering, n.e.c.
Total, all agencies	271,373	19,818	3,899	28,279	22,067	35,586	7,819	43,063	110,842
Departments:									
Department of Agriculture, total	11,193 347	0	0	191 191	51 51	9 9	21 21	0	10,921 75
Education, & Extension Service Forest Service	10,713 133	0 0	0 0	0 0	0 0	0 0	0 0	0 0	10,713 133
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	126,290 10,958 7,827 50,244 57,261	10,553 5,598 51 2,974 1,930	12 0 12 0 0	1,459 0 246 358 855	2,281 250 1,226 0 805	28,828 3,728 1,984 14,465 8,651	5,434 178 2,257 2,194 805	37,376 1,026 427 11,657 24,266	40,347 178 1,624 18,596 19,949
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Threat Reduction	5,822 46,319	0 1,930	0	0 50	0 0	2,322 5,507	0	2,884 21,382	616 17,450
Agency <sup>1</sup> Special Operations Command Washington Headquarters Svcs	157 1,196 3,767	0 0 0	0 0 0	0 0 805	0 0 805	0 0 822	0 0 805	0 0 0	157 1,196 530
Department of Energy	45,333	0	0	17,632	5,536	3,605	32	275	18,253
Dept of Health & Human Svcs, total National Institutes of Health	16,860 16,860	0 0	0	0	0	0	0	0 0	16,860 16,860
Other agencies:									
National Aeronautics & Space Admin National Science Foundation	25,829 45,868	9,265 0	3,887 0	347 8,650	0 14,199	2,694 450	1,336 996	1,541 3,871	6,759 17,702

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-79. Federal obligations for applied research performed at universities and colleges in mathematics and computer sciences and in social sciences, by selected agency and detailed field of science:

fiscal year 1998

#### [Dollars in thousands]

	Mathe	matics and	computer s	ciences			Social	sciences		
Agency and subdivision	Total	Mathe- matics	Computer sciences	Mathe- matics and com- puter sciences, n.e.c.	Total	Anthro- pology	Econom- ics	Politi- cal science	Soci- ology	Social sciences, n.e.c.
Total, all agencies	185,616	14,969	169,378	1,269	77,545	576	31,171	531	8,065	37,202
Departments:										
Department of Agriculture, total	488 17	488 17	0 0	0 0	34,845 0	0 0	28,475 0	0	6,370 0	0
Education, & Extension Service Economic Research Service Forest Service	0 0 266	0 0 266	0 0 0	0 0 0	26,414 4,961 1,550	0 0 0	20,292 4,961 1,302	0 0 0	6,122 0 248	0 0 0
Nat'l Agricultural Statistics SvcRural Business-Cooperative Svc	205 0	205 0	0 0	0	0 1,920	0 0	0 1,920	0	0	0
Department of Defense, total	164,965 1,356 1,276 752 161,581	10,532 166 85 0 10,281	153,965 1,069 1,059 752 151,085	468 121 132 0 215	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Washington Headquarters Svcs	215 158,132 3,234	0 8,664 1,617	0 149,468 1,617	215 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Dept of Health & Human Svcs, total Admin for Children & Families	8,777 0 1,808 6,969 0	3,653 0 308 3,345 0	5,124 0 1,500 3,624 0	0 0 0 0 0	34,876 9,874 2,995 19,108 2,899 2,899	0 0 0 0	456 0 456 0 0	0 0 0 0	921 0 921 0 0	33,499 9,874 1,618 19,108 2,899 2,899
Other agencies:										
National Aeronautics & Space Admin National Science Foundation	6,235 5,151	100 196	5,334 4,955	801 0	0 7,824	0 576	0 2,240	0 531	0 774	0 3,703

NOTES: Only the following six agencies are required to report to this section of the survey: the Departments of Agriculture, Defense, Energy, and Health and Human Services; the National Aeronautics and Space Administration; and the National Science Foundation. The applied research obligations of the six agencies included in this table represent approximately 90 percent of total Federal applied research obligations to universities and colleges in fiscal year 1998.

Data for only those agencies that had obligations in the variables represented by this in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** n.e.c. = Not elsewhere classified

# Table C-80. Federal obligations for research and development to foreign performers, by region, country, and agency: fiscal year 1998

#### [Dollars in thousands]

Page 1 of 2

Region and country	Total	USDA	DoD	DOE	HHS	AID1	NASA	NSF	Other 2
otal, all areas & organizations	299,132	4,050	167,413	2,010	41,567	21,142	47,496	9,194	6,260
	,				.				
Africa, total	5,983 4,282	0	3,177 2,147	0	671 0	2,135 2,135	0	0	(
Kenya	930	0	930	O	0	0	0	0	(
South AfricaOther Africa	218 553	0	100	0	118 553	0	0	0	(
North America, total	47,579	746	6,268	425	20,054	0	14,780	3,914	1,392
Bermuda Canada	2,899 40,440	0 27	21 6,247	0 425	0 17,569	0	14,780	2,878 0	1,392
Costa RicaJamaica	930	0 0	0 0	0	930 1,042	0	0 0	0 59	(
Mexico	1,070	0	0	0	93	0	0	977	C
Panama Trinidad and Tobago	719 420	719 0	0	0	0 420	0	0	0	0
South America, total	3,499	561	1,120	0	586	0	682	550	0
ArgentinaBrazil	597 2,111	537 24	0 1,011	0	60 526	0	0	0 550	0
Chile	682	0	1,011	0	0	0	682	0	0
Peru	109	0	109	0	0	0	0	0	0
Asia, total	102,333	27	97,996	0	3,325	611	94	0	280
AfghanistanBangladesh	3,354 48	0	3,354	0	48	0	0	0	C
China	753	0	ō	Ö	593	0	0	0	160
India	122	0	4	0	118	0	0	0	0
IndonesiaIsrael	456 95.351	0	456 93,230	0	0 1,991	0	0 10	0	0 120
Japan	1,286	0	862	0	340	0	84	0	120
Korea, Democratic People's									
Republic ofKorea, Republic of	35 35	0	35 35	0	0 0	0	0	0	0
Viet Nam	20	0	20	0	0	0	0	0	0
Other Asia	873	27	0	0	235	611	0	0	0
Europe, total	106,124	2,712	56,516	1,585	13,179	0	22,814	4,730	4,588
AustriaBelgium	2,594 807	0	62 267	344	38 540	0	0	2,150	0
Denmark	813	ŏ	32	ŏ	732	0	ŏ	49	Ö
Finland	511	0	0	0	511	0	0	0	0
France	6,457	1,884	455	0	1,172	0	72	1,520	1,354
Germany Hungary	4,618 15	1 0	2,517 15	0	0	0	1,323	684 0	93 0
Iceland	25	ŏ	25	ő	Ö	0	ő	ő	Ö
Ireland	4,446	0	3,437	0	1,009	0	0	0	0
Italy Latvia	1,467	0	136	138	880	0	13	0	300
Netherlands	33 1,032	0	33 370	0	0 187	0	475	0	0
Norway	5,106	o l	2,157	o l	0	0	1,590	0	1,359
Poland	101	1	0	0	0	0	0	0	100
Russian FederationSpain	5,178 12,451	0	5,178	0	0 56	0	0 12,390	0	0
Sweden	7,077	0	3,631	0	1,673	0	1,598	175	0
Switzerland	3,859	800	0	0	1,822	0	522	0	715
Ukraine	13	0	13	0	0	0	0	0	0
United Kingdom	45,024	15	37,883	1,103	4,559	0	910	152	402 265
Other Europe	4,497	10	301	0	0	0	3,921	0	26

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

### Table C-80. Federal obligations for research and development to foreign performers, by region, country, and agency: fiscal year 1998

#### [Dollars in thousands]

Page 2 of 2

Region and country	Total	USDA	DoD	DOE	HHS	AID <sup>1</sup>	NASA	NSF	Other <sup>2</sup>
Oceania, total Australia New Zealand	15,082 14,525 557	4 4 0	2,336 2,336 0	0 0 0	3,616 3,078 538	0	9,126 9,107 19	0 0 0	0 0 0
International Organizations	18,532	0	0	0	136	18,396	0	0	0

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. NOTES:

Prior to the Vol. 48 survey cycle, the National Science Foundation's Division of Science Resources Studies updated the list of foreign performers in the Federal funds survey to match the list of countries and territories in the 1996 UNESCO Statistical Yearbook.

KEY:

USDA = Department of Agriculture
DoD = Department of Defense
DOE = Department of Energy
HHS = Department of Health & Human Services AID = Agency for International Development
NASA = National Aeronautics & Space Administration

= National Science Foundation

SOURCE: National Science Foundation/Division of Science Resources Studies, Survey of Federal Funds for Research and Development: Fiscal

Years 1998, 1999, and 2000

Includes data for the Departments of Commerce, Interior, and Transportation; the Environmental Protection Agency, and the Nuclear Regulatory

# Table C-81. Federal obligations for basic research to foreign performers, by region, country, and agency: fiscal year 1998

### [Dollars in thousands]

Page 1 of 2

									Page 1 of 2
Region and country	Total	USDA	DoD	DOE	HHS	AID1	EPA	NASA	NSF
Total, all areas & organizations	50,374	1,672	9,974	1,064	23,014	218	299	4,939	9,194
Africa, total South Africa Other Africa	180 55 125	0 0 0	0 0 0	0 0 0	180 55 125	0 0 0	0 0 0	0 0 0	0 0 0
North America, total	20,192 2,899 14,595 470 584	381 0 0 0	1,839 21 1,818 0 0	399 0 399 0	11,385 0 10,104 470 525	0 0 0 0	25 0 25 0 0	2,249 0 2,249 0 0	3,914 2,878 0 0 59
Mexico Panama Trinidad and Tobago	1,024 381 239	0 381 0	0 0 0	0 0 0	47 0 239	0 0 0	0 0 0	0 0 0	977 0 0
South America, total Argentina Brazil	994 339 655	295 285 10	0 0 0	0 0 0	149 54 95	0 0 0	0 0 0	0 0 0	550 0 550
Asia, total	3,594 27 316 67 2,054	0 0 0 0	1,628 0 0 0 821	0 0 0 0	1,900 27 296 67 1,214	0 0 0 0	35 0 20 0 15	31 0 0 0 4	0 0 0 0
Japan Korea, Republic of Other Asia	993 35 102	0 0 0	772 35 0	0 0 0	194 0 102	0 0 0	0 0 0	27 0 0	0 0 0
Europe, total	22,137 2,501 308 498 291	996 0 0 0	5,543 7 0 32 0	665 344 0 0	7,339 0 308 417 291	0 0 0 0	239 0 0 0	2,625 0 0 0 0	4,730 2,150 0 49 0
France Germany Hungary Ireland Italy	3,396 976 15 680 700	995 1 0 0	233 186 15 105 56	0 0 0 0 138	515 0 0 575 502	0 0 0 0	119 12 0 0	14 93 0 0 4	1,520 684 0 0
Netherlands Norway Russian Federation Spain Sweden	273 321 76 36 1,960	0 0 0 0	158 8 76 4 113	0 0 0 0	107 0 0 32 954	0 0 0 0	0 0 0 0	8 313 0 0 718	0 0 0 0 175
Switzerland United Kingdom Other Europe	1,297 7,762 1,047	0 0 0	0 4,550 0	0 183 0	1,039 2,599 0	0 0 0	91 11 6	167 267 1,041	0 152 0

### Table C-81. Federal obligations for basic research to foreign performers, by region, country, and agency: fiscal year 1998

#### [Dollars in thousands]

Page 2 of 2

Region and country	Total	USDA	DoD	DOE	HHS	AID <sup>1</sup>	EPA	NASA	NSF
Oceania, total Australia New Zealand	3,059 2,752 307	0 0 0	964 964 0	0 0 0	2,061 1,754 307	0 0 0	0 0 0	34 34 0	0 0 0
International Organizations	218	0	0	0	0	218	0	0	0

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. NOTES:

Prior to the Vol. 48 survey cycle, the National Science Foundation's Division of Science Resources Studies updated the list of foreign performers in the Federal funds survey to match the list of countries and territories in the 1996 UNESCO Statistical Yearbook.

KEY:

USDA = Department of Agriculture
DoD = Department of Defense
DOE = Department of Energy
HHS = Department of Health & Human Services

AID = Agency for International Development
EPA = Environmental Protection Agency
NASA = National Aeronautics & Space Administration
NSF = National Science Foundation

# Table C-82. Federal obligations for research and development and for R&D plant for selected agencies, by State: fiscal year 1998 (revised)

#### [Dollars in thousands]

State	Research, development, and R&D plant	Research and development	R&D plant
Total	72,349,653	70,512,996	1,836,657
Alabama Alaska Arizona Arkansas California	2,051,454	2,012,829	38,625
	110,705	106,939	3,766
	993,257	985,734	7,523
	115,563	97,026	18,537
	12,642,223	12,215,846	426,377
Colorado Connecticut Delaware District of Columbia Florida	1,399,429	1,334,209	65,220
	694,899	692,341	2,558
	46,003	45,214	789
	2,242,273	2,229,086	13,187
	2,818,726	2,752,371	66,355
Georgia Hawaii Idaho Illinois Indiana	3,446,388	3,442,612	3,776
	164,761	160,826	3,935
	225,090	213,625	11,465
	1,280,140	1,127,553	152,587
	380,819	377,735	3,084
lowa	243,261	236,084	7,177
Kansas	129,253	128,697	556
Kentucky	188,955	188,955	0
Louisiana	253,961	223,555	30,406
Maine	105,474	103,901	1,573
Maryland	8,271,607	7,964,210	307,397
	3,122,958	3,112,271	10,687
	751,403	748,443	2,960
	810,603	807,083	3,520
	327,927	280,366	47,561
Missouri Montana Nebraska Nevada New Hampshire	934,769	930,735	4,034
	82,679	80,670	2,009
	85,832	84,982	850
	293,741	290,853	2,888
	272,101	269,132	2,969
New Jersey New Mexico New York North Carolina North Dakota	1,491,664	1,459,570	32,094
	2,005,510	1,891,565	113,945
	2,673,981	2,551,833	122,148
	955,082	924,652	30,430
	55,296	52,088	3,208
Ohio Oklahoma Oregon Pennsylvania Rhode Island	5,653,437	5,562,227	91,210
	178,097	175,497	2,600
	317,875	314,710	3,165
	1,904,200	1,886,258	17,942
	399,369	385,411	13,958
South Carolina South Dakota Tennessee Texas Utah	193,447	186,221	7,226
	46,589	46,003	586
	649,964	621,155	28,809
	4,146,558	4,110,756	35,802
	394,287	392,807	1,480
Vermont Virginia Washington West Virginia Wisconsin	57,702	57,596	106
	4,721,556	4,667,864	53,692
	1,258,666	1,244,174	14,492
	255,439	242,844	12,595
	333,314	332,203	1,111
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	34,215	33,549	666
	115,009	111,908	3,101
	64,149	61,938	2,211
	50,860	49,970	890
	22,142	18,222	3,920

#### NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in fiscal year 1998.

# Table C-83. Federal obligations for research and development for selected agencies, by State and performer: fiscal year 1998 (revised)

### [Dollars in thousands]

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									Page 1 of 2
						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	70,512,996	16,544,621	31,764,775	1,174,386	13,189,193	3,879,236	2,934,878	602,808	423,099
California	12,215,846 7,964,210 5,562,227 4,667,864 4,110,756	1,595,270 4,766,005 698,173 1,480,464 596,978	5,937,882 2,054,921 4,388,253 2,694,070 2,741,834	13,220 163,223 0 879 0	1,886,772 798,113 344,724 244,283 691,377	2,017,569 0 0 61,895 0	519,452 178,769 125,380 43,793 69,230	120,883 0 0 135,732 1,496	124,798 3,179 5,697 6,748 9,841
Georgia	3,442,612 3,112,271 2,752,371 2,551,833 2,229,086	235,596 301,193 749,648 191,988 1,717,704	2,920,561 991,701 1,683,990 709,033 202,014	0 0 0 0 350	270,814 823,426 299,747 1,121,737 151,507	0 221,292 0 213,181 2,036	10,287 706,800 10,708 221,286 150,383	0 63,007 0 0 2,119	5,354 4,852 8,278 94,608 2,973
Alabama New Mexico Pennsylvania New Jersey Colorado	2,012,829 1,891,565 1,886,258 1,459,570 1,334,209	752,619 395,908 132,927 392,554 202,224	878,065 170,514 702,304 784,488 604,876	0 614,018 219 0 0	225,263 85,267 853,437 218,031 278,740	130,201 608,320 16,884 37,387 65,204	24,312 15,147 173,970 17,106 54,822	0 0 0 6,082 123,027	2,369 2,391 6,517 3,922 5,316
Washington	1,244,174 1,127,553 985,734 930,735 924,652	183,685 71,946 138,493 48,544 235,873	427,331 82,221 636,632 560,924 121,168	0 0 0 0	355,630 504,232 159,883 294,459 499,001	0 398,996 36,485 0 0	121,688 61,529 7,777 22,202 63,610	149,770 0 0 0 0	6,070 8,629 6,464 4,606 5,000
Minnesota	807,083 748,443 692,341 621,155 392,807	38,437 111,457 18,257 37,925 135,365	472,522 160,127 379,213 54,239 111,547	0 0 0 307,181 0	196,262 450,082 265,433 181,024 142,514	0 0 0 10,256 0	93,791 17,989 23,557 27,685 1,296	0 0 0 0	6,071 8,788 5,881 2,845 2,085
Rhode Island Indiana Wisconsin Oregon Nevada	385,411 377,735 332,203 314,710 290,853	222,106 38,023 38,021 87,846 48,514	78,082 142,363 16,017 24,915 211,316	0 0 0 0	60,182 189,882 265,640 171,995 25,268	0 200 0 0	22,978 3,318 8,233 20,849 4,107	0 0 0 0	2,063 3,949 4,292 9,105 1,648
Mississippi  New Hampshire  West Virginia  lowa  Louisiana	280,366 269,132 242,844 236,084 223,555	132,896 33,959 96,682 32,701 84,315	70,301 163,677 84,815 24,757 20,104	0 0 0 0	67,535 69,064 26,830 150,856 111,713	0 0 30,448 20,824 0	7,886 1,669 868 4,093 4,117	0 0 0 0	1,748 763 3,201 2,853 3,306
Idaho Kentucky South Carolina Oklahoma Hawaii	213,625 188,955 186,221 175,497 160,826	25,042 6,591 44,872 51,038 54,776	108,599 99,613 22,122 54,017 30,246	57,105 0 18,191 0 0	20,652 73,577 92,443 60,570 52,256	0 0 0 0	1,337 1,708 2,583 7,988 21,777	0 0 692 0 0	890 7,466 5,318 1,884 1,771
Kansas Alaska Maine Arkansas Nebraska	128,697 106,939 103,901 97,026 84,982	24,757 44,010 10,953 45,895 28,873	19,642 17,637 44,317 2,199 2,104	0 0 0 0	78,444 29,598 15,190 44,974 46,328	0 0 0 0	1,210 3,707 31,050 2,488 6,572	0 0 0 0	4,644 11,987 2,391 1,470 1,105
Montana Vermont North Dakota South Dakota Delaware	80,670 57,596 52,088 46,003 45,214	33,101 4,171 27,360 27,501 3,722	9,897 12,827 376 6,083 7,877	0 0 0 0	32,949 37,865 21,036 9,429 29,971	0 0 0 0	3,149 1,483 1,145 2,125 3,042	0 0 0 0	1,574 1,250 2,171 865 602

### Table C-83. Federal obligations for research and development for selected agencies, by State and performer: fiscal year 1998 (revised)

#### [Dollars in thousands]

Page 2 of 2

									- 3 -				
			Extramural										
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts				
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	33,549 111,908 61,938 49,970 18,222	11,991 40,238 7,476 32,762 15,434	1,108 16,847 51 16,796 2,487	0 0 0 0	16,758 46,129 45,718 411 301	0 8,058 8,058 0 0		0 0 0 0	865 636 635 1 0				

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY: FFRDCs = Federally funded research and development centers

Table C-83a. Percentage distribution of Federal obligations for research and development to each performer for selected agencies, by State: fiscal year 1998 (revised)

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						Extramural			Page 1 01 2
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	17.3 11.3 7.9 6.6 5.8	9.6 28.8 4.2 8.9 3.6	18.7 6.5 13.8 8.5 8.6	1.1 13.9 .0 .1	14.3 6.1 2.6 1.9 5.2	52.0 .0 .0 1.6 .0	17.7 6.1 4.3 1.5 2.4	20.1 .0 .0 22.5 .2	29.5 .8 1.3 1.6 2.3
Georgia Massachusetts Florida New York District of Columbia	4.9 4.4 3.9 3.6 3.2	1.4 1.8 4.5 1.2 10.4	9.2 3.1 5.3 2.2 .6	.0 .0 .0 .0	2.1 6.2 2.3 8.5 1.1	.0 5.7 .0 5.5 .1	.4 24.1 .4 7.5 5.1	.0 10.5 .0 .0	1.3 1.1 2.0 22.4 .7
Alabama New Mexico Pennsylvania New Jersey Colorado	2.9 2.7 2.7 2.1 1.9	4.5 2.4 .8 2.4 1.2	2.8 .5 2.2 2.5 1.9	.0 52.3 * .0	1.7 .6 6.5 1.7 2.1	3.4 15.7 .4 1.0 1.7	.8 .5 5.9 .6 1.9	.0 .0 .0 1.0 20.4	.6 .6 1.5 .9 1.3
Washington	1.8 1.6 1.4 1.3 1.3	1.1 .4 .8 .3 1.4	1.3 .3 2.0 1.8 .4	.0 .0 .0 .0	2.7 3.8 1.2 2.2 3.8	.0 10.3 .9 .0	4.1 2.1 .3 .8 2.2	24.8 .0 .0 .0	1.4 2.0 1.5 1.1 1.2
Minnesota	1.1 1.1 1.0 .9 .6	.2 .7 .1 .2 .8	1.5 .5 1.2 .2 .4	.0 .0 .0 26.2 .0	1.5 3.4 2.0 1.4 1.1	.0 .0 .0 .3	3.2 .6 .8 .9	.0 .0 .0 .0	1.4 2.1 1.4 .7 .5
Rhode Island Indiana Wisconsin Oregon Nevada	.5 .5 .5 .4 .4	1.3 .2 .2 .5 .3	.2 .4 .1 .1	.0 .0 .0 .0	.5 1.4 2.0 1.3 .2	.0 * .0 .0	.8 .1 .3 .7	.0 .0 .0 .0	.5 .9 1.0 2.2 .4
Mississippi New Hampshire West Virginia Iowa Louisiana	.4 .4 .3 .3	.8 .2 .6 .2 .5	.2 .5 .3 .1	.0 .0 .0 .0	.5 .5 .2 1.1 .8	.0 .0 .8 .5	.3 .1 * .1	.0 .0 .0 .0	.4 .2 .8 .7
ldaho Kentucky South Carolina Oklahoma Hawaii	.3 .3 .2 .2	.2 * .3 .3	.3 .1 .2 .1	4.9 .0 1.5 .0	.2 .6 .7 .5	.0 .0 .0 .0	.1 .1 .3 .7	.0 .0 .1 .0	.2 1.8 1.3 .4
Kansas Alaska Maine Arkansas Nebraska	.2 .2 .1 .1	.1 .3 .1 .3 .2	.1 .1 .1 *	.0 .0 .0 .0	.6 .2 .1 .3	.0 .0 .0 .0	.1 1.1 .1 .2	.0 .0 .0 .0	1.1 2.8 .6 .3
Montana Vermont North Dakota South Dakota Delaware	.1 .1 .1 .1	.2 * .2 .2 *	* * *	.0 .0 .0 .0	.2 .3 .2 .1 .2	.0 .0 .0 .0	.1 .1 .1 .1	.0 .0 .0 .0	.4 .3 .5 .2

Table C-83a. Percentage distribution of Federal obligations for research and development to each performer for selected agencies, by State: fiscal year 1998 (revised)

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						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	* 0.2 .1 .1	0.1 .2 * .2 .1	0.1 * .1	.0 .0 .0 .0	0.1 .3 .3 *	.0 0.2 .2 .0	0.1 .0 .0 .0	.0 .0 .0 .0	0.2 .2 .2 .*

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

 $^\star$  = Amount less than .05 percent FFRDCs = Federally funded research and development centers

Table C-83b. Percentage distribution of Federal obligations for research and development to each State for selected agencies, by performer: fiscal year 1998 (revised)

Page 1 of 2

						Extramural			1 age 1 01 2
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Total	100.0	23.5	45.0	1.7	18.7	5.5	4.2	0.9	0.6
California	100.0 100.0 100.0 100.0 100.0	13.1 59.8 12.6 31.7 14.5	48.6 25.8 78.9 57.7 66.7	.1 2.0 .0 .*	15.4 10.0 6.2 5.2 16.8	16.5 .0 .0 1.3 .0	4.3 2.2 2.3 .9 1.7	1.0 .0 .0 2.9 *	1.0 * .1 .1 .2
Georgia	100.0 100.0 100.0 100.0 100.0	6.8 9.7 27.2 7.5 77.1	84.8 31.9 61.2 27.8 9.1	.0 .0 .0 .0	7.9 26.5 10.9 44.0 6.8	.0 7.1 .0 8.4 .1	.3 22.7 .4 8.7 6.7	.0 2.0 .0 .0	.2 .2 .3 3.7 .1
Alabama New Mexico Pennsylvania New Jersey Colorado	100.0 100.0 100.0 100.0 100.0	37.4 20.9 7.0 26.9 15.2	43.6 9.0 37.2 53.7 45.3	.0 32.5 * .0 .0	11.2 4.5 45.2 14.9 20.9	6.5 32.2 .9 2.6 4.9	1.2 .8 9.2 1.2 4.1	.0 .0 .0 .4 9.2	.1 .1 .3 .3
Washington	100.0 100.0 100.0 100.0 100.0	14.8 6.4 14.0 5.2 25.5	34.3 7.3 64.6 60.3 13.1	.0 .0 .0 .0	28.6 44.7 16.2 31.6 54.0	.0 35.4 3.7 .0	9.8 5.5 .8 2.4 6.9	12.0 .0 .0 .0	.5 .8 .7 .5
Minnesota Michigan Connecticut Tennessee Utah	100.0 100.0 100.0 100.0 100.0	4.8 14.9 2.6 6.1 34.5	58.5 21.4 54.8 8.7 28.4	.0 .0 .0 49.5 .0	24.3 60.1 38.3 29.1 36.3	.0 .0 .0 1.7 .0	11.6 2.4 3.4 4.5 .3	.0 .0 .0 .0	.8 1.2 .8 .5
Rhode Island	100.0 100.0 100.0 100.0 100.0	57.6 10.1 11.4 27.9 16.7	20.3 37.7 4.8 7.9 72.7	.0 .0 .0 .0	15.6 50.3 80.0 54.7 8.7	.0 .1 .0 .0	6.0 .9 2.5 6.6 1.4	.0 .0 .0 .0	.5 1.0 1.3 2.9 .6
Mississippi New Hampshire West Virginia lowa Louisiana	100.0 100.0 100.0 100.0 100.0	47.4 12.6 39.8 13.9 37.7	25.1 60.8 34.9 10.5 9.0	.0 .0 .0 .0	24.1 25.7 11.0 63.9 50.0	.0 .0 12.5 8.8 .0	2.8 .6 .4 1.7 1.8	.0 .0 .0 .0	.6 .3 1.3 1.2 1.5
Idaho	100.0 100.0 100.0 100.0 100.0	11.7 3.5 24.1 29.1 34.1	50.8 52.7 11.9 30.8 18.8	26.7 .0 9.8 .0	9.7 38.9 49.6 34.5 32.5	.0 .0 .0 .0	.6 .9 1.4 4.6 13.5	.0 .0 .4 .0	.4 4.0 2.9 1.1 1.1
Kansas	100.0 100.0 100.0 100.0 100.0	19.2 41.2 10.5 47.3 34.0	15.3 16.5 42.7 2.3 2.5	.0 .0 .0 .0	61.0 27.7 14.6 46.4 54.5	.0 .0 .0 .0	.9 3.5 29.9 2.6 7.7	.0 .0 .0 .0	3.6 11.2 2.3 1.5 1.3
Montana Vermont North Dakota South Dakota Delaware	100.0 100.0 100.0 100.0 100.0	41.0 7.2 52.5 59.8 8.2	12.3 22.3 .7 13.2 17.4	.0 .0 .0 .0	40.8 65.7 40.4 20.5 66.3	.0 .0 .0 .0	3.9 2.6 2.2 4.6 6.7	.0 .0 .0 .0	2.0 2.2 4.2 1.9 1.3

### Table C-83b. Percentage distribution of Federal obligations for research and development to each State for selected agencies, by performer: fiscal year 1998 (revised)

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						Extramural			
State (in order of total Federal research & development obligations)	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by industrial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other non- profit institu- tions	FFRDCs admin by nonprofit institu- tions	State and local govts
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	100.0 100.0 100.0 100.0 100.0	36.0 12.1	3.3 15.1 .1 33.6 13.6	.0 .0 .0 .0	41.2 73.8 .8	.0 7.2 13.0 .0	8.4 .0 .0 .0	.0 .0 .0 .0	2.6 .6 1.0 *

Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

 $^\star$  = Amount less than .05 percent FFRDCs = Federally funded research and development centers

### [Dollars in thousands]

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State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total	70,512,996	1,436,996	948,381	35,127,171	5,871,794	13,662,665	530,904	565,555	568,854	9,520,533	2,280,143
California	12,215,846	78,512	80,711	6,436,570	1,022,019	1,529,761	36,965	23,566	31,969	2,628,415	347,358
Maryland	7,964,210	138,061	348,425	2,715,895	58,127	3,233,290	12,348	24,572	8,056	1,364,748	60,688
Ohio		15,579	4,387	4,558,991	16,901	360,550	5,397	14,638	64,938	482,907	37,939
Virginia Texas	4,667,864 4,110,756	9,580 63,664	13,022 12,545	3,677,347 1,100,366	86,785 22,885	167,903 523,738	43,493 23,049	30,455 12,444	21,704 14,976	557,914 2,265,388	59,661 71,701
Georgia	3.442.612	46.693	4.618	2.979.614	11.477	312,057	7.880	4.935	16.199	22.841	36.298
Massachusetts		22,399	44,145	1,439,986	100,568	1,124,925	6,062	38,016	19,434	143,063	173,673
Florida	2,752,371	35,715	46,249	1,971,409	57,739	156,940	28,666	6,019	8,824	374,334	66,476
New York	2,551,833	33,988	18,360	606,358	553,803	1,076,498	8,200	9,836	8,621	58,805	177,364
District of Columbia	2,229,086	168,355	16,087	1,094,165	282,183	179,298	2,351	145,327	70,834	196,235	74,251
Alabama	2,012,829	14,781	610	1,157,497	152,195	164,201	4,662	3,465	4,531	498,536	12,351
New Mexico Pennsylvania	1,891,565 1,886,258	7,431 42,490	1,400 5,924	586,781 587,534	1,175,695 340,893	46,423 725,576	9,351 8,140	6,371 9,039	4,278 4,751	40,943 51,497	12,892 110,414
New Jersey	1,459,570	7,226	23,458	995,436	69,267	123,404	3,970		5,044	64,684	59,325
Colorado	1,334,209	26,699	86,190	559,410	138,686	187,331	45,101	11,836	10,201	156,560	112,195
Washington	1,244,174	36,264	61,629	421,089	161,184	381,681	11,445	5,148	5,272	109,947	50,515
Illinois	1,127,553	43,013	4,720	123,493	454,767	342,935	5,786	11,685	2,860	17,556	120,738
Arizona	985,734	21,817	2,059	726,497	4,017	84,299	11,984	1,753	2,512	56,587	74,209
Missouri	930,735	20,374	1,012	581,523	4,727	264,584	13,171	2,779	2,816	16,251	23,498
North Carolina	924,652	33,582	13,234	140,363	16,848	517,469	7,504	5,095	132,314	13,266	44,977
Minnesota	807,083	22,693	4,578	492,799	6,564	211,333	8,049	5,339	14,718	8,093	32,917
Michigan	748,443 692,341	21,110 6,151	24,263 5,728	230,914 283,579	15,880 54,480	306,905 236,460	10,130 1,467	7,487 14,327	18,849 891	30,304 63,436	82,601 25,822
Connecticut Tennessee	621,155	8,712	1,598	64,824	319,786	168,671	6,193	4,382	1,467	29,971	25,622 15,551
Utah	392,807	13,527	2,293	240,273	8,000	78,397	7,802	852	1,208	16,306	24,149
Rhode Island	385,411	1,835	3,727	291,853	2,356	49,613	2,477	1,001	12,007	3,308	17,234
Indiana	377,735	14,097	2,180	176,279	17,778	106,863	3,996	3,612	1,105	7,708	44,117
Wisconsin	332,203	34,177	4,547	11,998	20,031	185,558	12,733	2,952	1,988	14,615	43,604
Oregon	314,710	35,129	16,004	16,678	34,653	135,026	12,117	1,834	24,064	9,159	30,046
Nevada	290,853	2,869	115	43,753	194,692	9,894	9,508	4,946	14,637	2,914	7,525
Mississippi	280,366	60,342	6,275	132,867	1,833	13,914	6,320	1,923	1,542	47,604	7,746
New Hampshire	269,132 242,844	4,673 20,579	7,824 647	184,392 18,068	670 101,577	35,610	1,971 7,089	2,191	889 187	18,349 18,286	12,563 34.659
West VirginiaIowa	236,084	39,549	807	28,202	26,793	39,299 105,402	5,362	2,453 3,051	2,369	10,266	13,883
Louisiana	223,555	43,348	3,124	38,025	4,319	68,012	16,097	1,676	4,962	33,797	10,195
Idaho	213,625	17,793	1,320	19,502	157,221	2,869	9,068	2,228	0	912	2,712
Kentucky	188,955	7,845	588	9,613	98,213	53,102	3,689	3,418	1,840	1,533	9,114
South Carolina	186,221	14,864	10,699	52,269	28,331	50,813	4,501	1,812	2,312	3,296	17,324
Oklahoma	175,497	17,712	6,642	41,440	26,475	34,946	5,489	11,787	14,326	3,212	13,468
Hawaii	160,826	21,859	13,772	60,283	3,541	21,868	5,810	548	0	18,574	14,571
Kansas	128,697	13,736	1,028	31,276	3,890	48,338	6,466	1,373	2,842	5,555	14,193
Alaska Maine	106,939 103,901	7,574 3,943	24,261 6,370	27,262 48,148	50 223	2,109 31,072	22,129 3,976	1,296 565	290 996	12,250 2,701	9,718 5,907
Arkansas	97,026	26,191	388	8,420	50	49,208	4.443	1,405	381	1,881	4,659
Nebraska	84,982	27,427	744	7,617	705	30,566	6,956	905	250	2,305	7,507
Montana	80,670	17,657	5,091	12,793	984	12,861	14,887	1,229	321	6,177	8,670
Vermont	57,596	5,418	776	13,640	584	29,291	1,378	497	743	699	4,570
North Dakota	52,088	26,003	659	2,556	5,167	2,872	6,893	1,720	1,100	1,854	3,264
South Dakota	46,003	7,007	677	1,799	50	2,578	13,526	781	275	15,950	3,360
Delaware	45,214	3,715	1,818	11,735	1,504	7,577	828	922	1,554	4,036	11,525
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#### [Dollars in thousands]

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State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	33,549 111,908 61,938 49,970 18,222	13,273	1,029 994 35	2,951 45,949 1,953 43,996 15,090	841 0	1,938 26,837 26,837 0	6,575	0	157 157	850 3,755 3,755 0 0	7,484 12,962 12,962 0

Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998. NOTE:

KEY:

EPA = Environmental Protection Agency NASA = National Aeronautics & Space Administration

Table C-84a. Percentage distribution of Federal obligations for research and development of each selected agency, by State: fiscal year 1998 (revised)

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										r	age 1 01 2
State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	17.3 11.3 7.9 6.6 5.8	5.5 9.6 1.1 .7 4.4	8.5 36.7 .5 1.4 1.3	18.3 7.7 13.0 10.5 3.1	17.4 1.0 .3 1.5 .4	11.2 23.7 2.6 1.2 3.8	7.0 2.3 1.0 8.2 4.3	4.2 4.3 2.6 5.4 2.2	5.6 1.4 11.4 3.8 2.6	27.6 14.3 5.1 5.9 23.8	15.2 2.7 1.7 2.6 3.1
Georgia	4.9 4.4 3.9 3.6 3.2	3.2 1.6 2.5 2.4 11.7	.5 4.7 4.9 1.9 1.7	8.5 4.1 5.6 1.7 3.1	.2 1.7 1.0 9.4 4.8	2.3 8.2 1.1 7.9 1.3	1.5 1.1 5.4 1.5	.9 6.7 1.1 1.7 25.7	2.8 3.4 1.6 1.5 12.5	.2 1.5 3.9 .6 2.1	1.6 7.6 2.9 7.8 3.3
Alabama New Mexico Pennsylvania New Jersey Colorado	2.9 2.7 2.7 2.1 1.9	1.0 .5 3.0 .5 1.9	.1 .1 .6 2.5 9.1	3.3 1.7 1.7 2.8 1.6	2.6 20.0 5.8 1.2 2.4	1.2 .3 5.3 .9 1.4	.9 1.8 1.5 .7 8.5	.6 1.1 1.6 19.1 2.1	.8 .8 .9 1.8	5.2 .4 .5 .7 1.6	.5 .6 4.8 2.6 4.9
Washington	1.8 1.6 1.4 1.3	2.5 3.0 1.5 1.4 2.3	6.5 .5 .2 .1	1.2 .4 2.1 1.7 .4	2.7 7.7 .1 .1 .3	2.8 2.5 .6 1.9 3.8	2.2 1.1 2.3 2.5 1.4	.9 2.1 .3 .5	.9 .5 .4 .5 23.3	1.2 .2 .6 .2	2.2 5.3 3.3 1.0 2.0
Minnesota Michigan Connecticut Tennessee Utah	1.1 1.1 1.0 .9 .6	1.6 1.5 .4 .6	.5 2.6 .6 .2	1.4 .7 .8 .2 .7	.1 .3 .9 5.4 .1	1.5 2.2 1.7 1.2 .6	1.5 1.9 .3 1.2 1.5	.9 1.3 2.5 .8 .2	2.6 3.3 .2 .3 .2	.1 .3 .7 .3 .2	1.4 3.6 1.1 .7 1.1
Rhode Island	.5 .5 .5 .4 .4	.1 1.0 2.4 2.4 .2	.4 .2 .5 1.7	.8 .5 * *	* .3 .6 3.3	.4 .8 1.4 1.0	.5 .8 2.4 2.3 1.8	.2 .6 .5 .3	2.1 .2 .3 4.2 2.6	.1 .2 .1 .*	.8 1.9 1.9 1.3
Mississippi New Hampshire West Virginia lowa Louisiana	.4 .4 .3 .3 .3	4.2 .3 1.4 2.8 3.0	.7 .8 .1 .1	.4 .5 .1 .1	* 1.7 .5 .1	.1 .3 .3 .8 .5	1.2 .4 1.3 1.0 3.0	.3 .4 .4 .5	.3 .2 * .4 .9	.5 .2 .2 .1 .4	.3 .6 1.5 .6 .4
Idaho	.3 .3 .3 .2 .2	1.2 .5 1.0 1.2 1.5	.1 .1 1.1 .7 1.5	.1 * .1 .1	2.7 1.7 .5 .5	.4 .4 .3 .2	1.7 .7 .8 1.0 1.1	.4 .6 .3 2.1 .1	.0 .3 .4 2.5	* * * .2	.1 .4 .8 .6 .6
Kansas Alaska Maine Arkansas Nebraska	.2 .2 .1 .1	1.0 .5 .3 1.8 1.9	.1 2.6 .7 *	.1 .1 .1 *	.1 * * *	.4 * .2 .4 .2	1.2 4.2 .7 .8 1.3	.2 .2 .1 .2	.5 .1 .2 .1 .*	.1 .1 * *	.6 .4 .3 .2 .3
Montana Vermont North Dakota South Dakota Delaware	.1 .1 .1 .1	1.2 .4 1.8 .5 .3	.5 .1 .1 .1	* * *	* .1 *	.1 .2 * *	2.8 .3 1.3 2.5 .2	.2 .1 .3 .1 .2	.1 .1 .2 *	.1 * * .2 *	.4 .2 .1 .1 .5

### Table C-84a. Percentage distribution of Federal obligations for research and development of each selected agency, by State: fiscal year 1998 (revised)

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State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	0.2 .1 .1	0.5 .9 .9 .0	0.1 .1 .*	0.1 * .1	0.1 * * .0	.0 .0 .0	1.4 1.2 .2 1.0	0.3 .1 .0 .1	0.1 * * .0		

Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

\* = Amount less than .05 percent EPA = Environmental Protection Agency NASA = National Aeronautics & Space Administration

Table C-84b. Percentage distribution of Federal obligations for research and development of each State, by selected agency: fiscal year 1998 (revised)

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										1	Page 1 of 2
State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total	100.0	2.0	1.3	49.8	8.3	19.4	0.8	0.8	0.8	13.5	3.2
California	100.0 100.0 100.0 100.0 100.0	.6 1.7 .3 .2 1.5	.7 4.4 .1 .3	52.7 34.1 82.0 78.8 26.8	8.4 .7 .3 1.9 .6	12.5 40.6 6.5 3.6 12.7	.3 .2 .1 .9	.2 .3 .3 .7 .3	.3 .1 1.2 .5 .4	21.5 17.1 8.7 12.0 55.1	2.8 .8 .7 1.3 1.7
Georgia Massachusetts Florida New York District of Columbia	100.0 100.0 100.0 100.0 100.0	1.4 .7 1.3 1.3 7.6	.1 1.4 1.7 .7	86.6 46.3 71.6 23.8 49.1	.3 3.2 2.1 21.7 12.7	9.1 36.1 5.7 42.2 8.0	.2 .2 1.0 .3 .1	.1 1.2 .2 .4 6.5	.5 .6 .3 .3 3.2	.7 4.6 13.6 2.3 8.8	1.1 5.6 2.4 7.0 3.3
Alabama New Mexico Pennsylvania New Jersey Colorado	100.0 100.0 100.0 100.0 100.0	.7 .4 2.3 .5 2.0	.1 .3 1.6 6.5	57.5 31.0 31.1 68.2 41.9	7.6 62.2 18.1 4.7 10.4	8.2 2.5 38.5 8.5 14.0	.2 .5 .4 .3 3.4	.2 .3 .5 7.4 .9	.2 .2 .3 .3	24.8 2.2 2.7 4.4 11.7	.6 .7 5.9 4.1 8.4
Washington	100.0 100.0 100.0 100.0 100.0	2.9 3.8 2.2 2.2 3.6	5.0 .4 .2 .1 1.4	33.8 11.0 73.7 62.5 15.2	13.0 40.3 .4 .5 1.8	30.7 30.4 8.6 28.4 56.0	.9 .5 1.2 1.4 .8	.4 1.0 .2 .3 .6	.4 .3 .3 .3 14.3	8.8 1.6 5.7 1.7 1.4	4.1 10.7 7.5 2.5 4.9
Minnesota Michigan Connecticut Tennessee Utah	100.0 100.0 100.0 100.0 100.0	2.8 2.8 .9 1.4 3.4	.6 3.2 .8 .3 .6	61.1 30.9 41.0 10.4 61.2	.8 2.1 7.9 51.5 2.0	26.2 41.0 34.2 27.2 20.0	1.0 1.4 .2 1.0 2.0	.7 1.0 2.1 .7 .2	1.8 2.5 .1 .2 .3	1.0 4.0 9.2 4.8 4.2	4.1 11.0 3.7 2.5 6.1
Rhode Island	100.0 100.0 100.0 100.0 100.0	.5 3.7 10.3 11.2 1.0	1.0 .6 1.4 5.1	75.7 46.7 3.6 5.3 15.0	.6 4.7 6.0 11.0 66.9	12.9 28.3 55.9 42.9 3.4	.6 1.1 3.8 3.9 3.3	.3 1.0 .9 .6 1.7	3.1 .3 .6 7.6 5.0	.9 2.0 4.4 2.9 1.0	4.5 11.7 13.1 9.5 2.6
Mississippi New Hampshire West Virginia Iowa Louisiana	100.0 100.0 100.0 100.0 100.0	21.5 1.7 8.5 16.8 19.4	2.2 2.9 .3 .3 1.4	47.4 68.5 7.4 11.9 17.0	.7 .2 41.8 11.3 1.9	5.0 13.2 16.2 44.6 30.4	2.3 .7 2.9 2.3 7.2	.7 .8 1.0 1.3 .7	.5 .3 .1 1.0 2.2	17.0 6.8 7.5 4.5 15.1	2.8 4.7 14.3 5.9 4.6
Idaho	100.0 100.0 100.0 100.0 100.0	8.3 4.2 8.0 10.1 13.6	.6 .3 5.7 3.8 8.6	9.1 5.1 28.1 23.6 37.5	73.6 52.0 15.2 15.1 2.2	1.3 28.1 27.3 19.9 13.6	4.2 2.0 2.4 3.1 3.6	1.0 1.8 1.0 6.7 .3	.0 1.0 1.2 8.2 .0	.4 .8 1.8 1.8 11.5	1.3 4.8 9.3 7.7 9.1
Kansas Alaska Maine Arkansas Nebraska	100.0 100.0 100.0 100.0 100.0	10.7 7.1 3.8 27.0 32.3	.8 22.7 6.1 .4 .9	24.3 25.5 46.3 8.7 9.0	3.0 * .2 .1 .8	37.6 2.0 29.9 50.7 36.0	5.0 20.7 3.8 4.6 8.2	1.1 1.2 .5 1.4 1.1	2.2 .3 1.0 .4 .3	4.3 11.5 2.6 1.9 2.7	11.0 9.1 5.7 4.8 8.8
Montana Vermont North Dakota South Dakota Delaware	100.0 100.0 100.0 100.0 100.0	21.9 9.4 49.9 15.2 8.2	6.3 1.3 1.3 1.5 4.0	15.9 23.7 4.9 3.9 26.0	1.2 1.0 9.9 .1 3.3	15.9 50.9 5.5 5.6 16.8	18.5 2.4 13.2 29.4 1.8	1.5 .9 3.3 1.7 2.0	.4 1.3 2.1 .6 3.4	7.7 1.2 3.6 34.7 8.9	10.7 7.9 6.3 7.3 25.5

Table C-84b. Percentage distribution of Federal obligations for research and development of each State, by selected agency: fiscal year 1998 (revised)

Page 2 of 2

State (in order of total Federal research & development obligations)	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense <sup>1</sup>	Dept of Energy	Dept of Health & Human Services	Dept of the Interi- or	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Wyoming Outlying areas Puerto Rico Other areas Offices abroad	100.0 100.0 100.0 100.0 100.0	20.4 11.9 21.4 .0 17.2	0.1 .9 1.6 .1	8.8 41.1 3.2 88.0 82.8	11.3 .8 1.4 .0	5.8 24.0 43.3 .0	22.2 5.9 1.9 10.8 .0	.5 .0	1.3 .1 .3 .0	3.4 6.1	11.6 20.9 .0

Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D obligations in fiscal year 1998.

KEY:

\* = Amount less than .05 percent EPA = Environmental Protection Agency NASA = National Aeronautics & Space Administration

### [Dollars in thousands]

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					E	ktramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Alabama, total	2,012,829	752,619	878,065	0	225,263	130,201	24,312	0	2,369
Department of Agriculture	14,781 610 82,355	4,961 5 33,791	0 213 32,494	0 0 0	9,795 392 14,354	0 0 0	0 0 1,716	0 0 0	25 0 0
development <sup>3</sup> Department of Energy	1,075,142 152,195	400,252 49	672,003 16,198	0 0	2,427 4,410	0 130,201	460 1,337	0 0	C
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	164,201 4,662 3,465 4,531 498,536 12,351	404 4,304 159 0 308,694	2,861 35 355 230 153,176 500	0 0 0 0 0	147,132 255 759 960 33,697 11,082	0 0 0 0 0	13,784 0 0 3,341 2,905 769	0 0 0 0 0	20 68 2,192 0 64
Alaska, total	106,939	44,010	17,637	0	29,598	0	3,707	0	11,987
Department of Agriculture	7,574 24,261 932	5,159 19,743 632	0 0 187	0 0 0	2,415 4,472 113	0 0 0	0 0 0	0 0 0	0 46 0
development <sup>3</sup> Department of Energy	26,330 50	1,096 0	14,570 0	0 0	664 50	0	0	0 0	10,000 0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	2,109 22,129 1,296 290 12,250 9,718	285 16,756 0 0 339 0	119 2,230 0 70 85 376	0 0 0 0 0	1,424 2,748 0 220 9,326 8,166	0 0 0 0 0	0 31 0 2,500 1,176	0 0 0 0 0	281 364 1,296 0 0
Arizona, total	985,734	138,493	636,632	0	159,883	36,485	7,777	0	6,464
Department of Agriculture  Department of Commerce  Department of Defense, research 2  Department of Defense, total	21,817 2,059 45,374	15,904 114 9,278	0 901 19,939	0 0 0	5,872 1,044 16,148	0 0 0	41 0 9	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	681,123 4,017	92,575 0	580,800 0	0 0	5,148 4,017	0	0	0	2,600 0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	84,299 11,984 1,753 2,512 56,587 74,209	4,830 10,780 0 0 5,012	3,533 47 25 212 29,150 2,025	0 0 0 0 0	67,961 1,015 25 2,300 20,867 35,486	0 0 0 0 0 36,485	6,149 7 0 0 1,358 213	0 0 0 0 0	1,826 135 1,703 0 200
Arkansas, total	97,026	45,895	2,199	0	44,974	0	2,488	0	1,470
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	26,191 388 3,953 4,467	13,730 58 0 3,857	9 0 196 550	0 0 0	12,452 0 3,757	0 0 0	0 330 0	0 0 0	000000000000000000000000000000000000000
Department of Energy	50	0,857	0	0	50	0	0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	49,208 4,443 1,405 381 1,881 4,659	23,983 4,267 0 0 0	679 4 0 0 685 76	0 0 0 0 0	22,363 132 0 381 1,196 4,583	0 0 0 0 0	2,158 0 0 0 0 0	0 0 0 0 0	25 40 1,405 0 0

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					L	Allalliulai			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
California, total	12,215,846	1,595,270	5,937,882	13,220	1,886,772	2,017,569	519,452	120,883	124,798
Department of Agriculture	80,711 656,996	57,938 18,401 115,869	53,469 301,420	0 0 0	20,113 7,610 186,720	0 0 27,319	461 534 19,826	0 0 5,842	0 697 0
development <sup>3</sup> Department of Energy		1,052,471 7,432	4,443,438 73,968	1,674 11,546	33,458 109,613	42,485 805,229	11,318 14,231	97,297 0	97,433 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,529,761 36,965 23,566 31,969 2,628,415 347,358	5,225 25,964 951 0 310,808 211	121,515 1,047 5,743 1,086 924,573 11,623	0 0 0 0 0	1,009,445 9,455 4,676 23,237 168,470 313,975	22,030 0 0 0 1,120,293 213	355,107 22 1,461 821 94,448 21,223	14,689 0 0 0 2,942 113	1,750 477 10,735 6,825 6,881
Colorado, total	1,334,209	202,224	604,876	0	278,740	65,204	54,822	123,027	5,316
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	26,699 86,190 58,227	20,378 76,599 4,930	0 1,917 36,660	0 0 0	6,143 7,674 14,295	0 0 16	178 0 2,296	0 0 30	0 0 0
development <sup>3</sup> Department of Energy		46,242 2,910	449,151 1,500	0	2,178 8,618	1,875 0	1,737 2,621	0 122,997	0 40
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	187,331 45,101 11,836 10,201 156,560 112,195	745 41,871 3 0 8,130 416	7,545 42 10,394 70 93,036 4,561	0 0 0 0 0	140,823 2,648 101 4,126 49,087 43,047	0 0 0 381 62,932	35,005 188 0 6,005 5,757 1,035	0 0 0 0 0	3,213 352 1,338 0 169 204
Connecticut, total	692,341	18,257	379,213	0	265,433	0	23,557	0	5,881
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	6,151 5,728 39,490	2,591 235 1,711	0 3,145 27,108	0 0 0	2,679 2,348 8,400	0 0 0	0 0 2,271	0 0 0	881 0 0
development <sup>3</sup> Department of Energy	244,089 54,480	3,400 0	232,876 44,129	0	290 10,351	0 0	7,523 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	236,460 1,467 14,327 891 63,436 25,822	24 1,296 9,000 0 0	6,995 55 3,704 210 58,961 2,030	0 0 0 0 0	215,093 116 0 245 2,441 23,470	0 0 0 0 0	11,407 0 0 0 2,034 322	0 0 0 0 0	2,941 0 1,623 436 0
Delaware, total	45,214	3,722	7,877	0	29,971	0	3,042	0	602
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	3,715 1,818 9,670 2,065 1,504	1,366 634 628 386 0	0 214 3,414 1,601 181	0 0 0	2,349 970 5,540 78	0 0 0 0	0 0 88 0 60	0 0 0	0 0 0
Department of Energy  Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	7,577 828 922 1,554	5 703 0 0	841 0 400 0 839 387	0 0 0 0 0 0 0	1,263 6,148 95 0 1,554 2,125 9,849	0 0 0 0 0	533 0 0 0 1,072 1,289	0 0 0 0 0	50 30 522 0 0

### [Dollars in thousands]

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								Pag	e 3 of 14
					E	ktramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
District of Columbia, total	2,229,086	1,717,704	202,014	350	151,507	2,036	150,383	2,119	2,973
Department of Agriculture	168,355 16,087 243,464	157,585 14,066 208,289	9,278 522 16,683	0 0 0	758 796 14,798	0 0 0	589 703 3,694	0 0 0	145 (
development <sup>3</sup>	850,701 282,183	685,541 268,485	117,253 2,422	350 0	42,222 1,750	2,036 0	1,250 9,526	2,049 0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	179,298 2,351 145,327 70,834 196,235 74,251	54,131 2,030 101,069 51,000 169,136 6,372	17,076 134 31,529 2,082 3,749 1,286	0 0 0 0	71,810 32 4,179 590 7,177 7,395	0 0 0 0 0	36,081 155 8,057 14,987 16,143 59,198	0 0 70 0 0	200 423 2,175 30
Florida, total	2,752,371	749,648	1,683,990	0	299,747	0	10,708	0	8,278
Department of Agriculture	35,715 46,249 137,227	23,313 35,271 65,939	153 1,924 37,831	0 0 0	12,219 8,629 32,940	0 0 0	0 349 517	0 0 0	30 76 0
development <sup>3</sup> Department of Energy	1,834,182 57,739	380,814 0	1,451,687 45,336	0 0	1,498 12,403	0 0	10 0	0	173 (
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	156,940 28,666 6,019 8,824 374,334 66,476	49 25,295 0 7,650 211,317 0	6,819 336 929 0 137,226 1,749	0 0 0 0 0	143,894 2,869 30 776 22,273 62,216	0 0 0 0	5,595 0 0 40 1,686 2,511	0 0 0 0 0	583 166 5,060 358 1,832
Georgia, total	3,442,612	235,596	2,920,561	0	270,814	0	10,287	0	5,354
Department of Agriculture	46,693 4,618 43,026	34,407 942 7,719	0 2,812 10,982	0 0 0	12,212 852 23,571	0 0 0	44 0 754	0 0 0	30 12 (
development <sup>3</sup> Department of Energy	2,936,588 11,477	19,899 0	2,894,988 396	0 0	18,928 10,318	0	2,773 763	0	(
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	312,057 7,880 4,935 16,199 22,841 36,298	150,719 7,236 188 10,200 4,286 0	3,958 84 0 251 6,121 969	0 0 0 0 0	153,214 492 742 5,584 10,687 34,214	0 0 0 0 0	4,042 0 0 164 1,747 0	0 0 0 0 0	124 68 4,005 0 0 1,115
Hawaii, total	160,826	54,776	30,246	0	52,256	0	21,777	0	1,771
Department of Agriculture  Department of Commerce Department of Defense, research 2 Department of Defense, total	21,859 13,772 14,844	11,159 9,263 5,433	0 355 7,238	0 0 0	5,110 3,407 2,173	0 0 0	5,590 110 0	0 0 0	637 637
development <sup>3</sup> Department of Energy	45,439 3,541	23,556 0	21,381 0	0 0	502 3,421	0	0 120	0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation National Aeronautics and Space Admin National Science Foundation	21,868 5,810 548 18,574 14,571	59 5,106 0 200 0	779 52 0 41 400	0 0 0 0	17,163 523 0 6,115 13,842	0 0 0 0	3,307 129 0 12,192 329	0 0 0 0	560 548 26

### [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Idaho, total	213,625	25,042	108,599	57,105	20,652	0	1,337	0	890
Department of Agriculture	17,793 1,320 5,742	13,648 1,320 296	0 0 408	0 0 2,189	4,145 0 2,849	0 0 0	0 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	13,760 157,221	660 1,400	12,722 95,263	254 53,167	124 7,391	0 0	0 0	0	0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  National Aeronautics and Space Admin  National Science Foundation	2,869 9,068 2,228 912 2,712	9 7,370 0 339 0	101 5 33 67 0	0 0 1,395 100 0	1,422 1,603 0 406 2,712	0 0 0 0	1,337 0 0 0 0	0 0 0 0	0 90 800 0
Illinois, total	1,127,553	71,946	82,221	0	504,232	398,996	61,529	0	8,629
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	43,013 4,720 59,088	31,528 67 11,428	0 3,590 9,909	0 0 0	11,075 683 34,155	0 0 3,385	410 380 211	0 0 0	0 0 0
development <sup>3</sup>	64,405 454,767	16,364 4,595	34,717 13,427	0 0	7,980 44,628	5,216 390,068	128 2,049	0 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	342,935 5,786 11,685 2,860 17,556 120,738	342 5,112 45 0 2,465	10,615 4,601 282 3,365 1,711	0 0 0 0	274,036 205 2,626 2,578 10,187 116,079	0 0 57 0 270 0	53,520 0 804 0 1,079 2,948	0 0 0 0 0	4,422 465 3,552 0 190 0
Indiana, total	377,735	38,023	142,363	0	189,882	200	3,318	0	3,949
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	14,097 2,180 17,943	4,936 84 2,318	0 1,049 3,174	0 0 0	9,161 572 12,451	0 0 0	0 475 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	158,336 17,778	25,878 0	129,549 150	0 0	962 17,628	200 0	1,747 0	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	106,863 3,996 3,612 1,105 7,708 44,117	155 3,731 0 0 921 0	3,796 25 1,062 56 3,175 327	0 0 0 0 0	101,374 79 0 584 3,281 43,790	0 0 0 0 0	300 0 0 465 331 0	0 0 0 0 0	1,238 161 2,550 0 0
lowa, total	236,084	32,701	24,757	0	150,856	20,824	4,093	0	2,853
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	39,549 807 9,809 18,393 26,793	27,187 0 0 343 0	0 357 5,573 15,192	0 0 0 0	12,360 450 4,106 1,783 4,999	0 0 130 1,075 19,619	2 0 0 0 2,175	0 0 0 0	0 0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	105,402 5,362 3,051 2,369 10,666 13,883	11 5,160 0 0 0	1,951 3 0 0 1,681 0	0 0 0 0 0 0 0	101,249 120 567 2,369 8,985 13,868	0 0 0 0 0 0	1,901 0 0 0 0 0	0 0 0 0 0 0 0	290 79 2,484 0 0

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Kansas, total	128,697	24,757	19,642	0	78,444	0	1,210	0	4,644
Department of Agriculture	13,736 1,028 5,031	7,849 154 703	0 0 185	0 0 0	5,878 425 4,143	0 0 0	9 449 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	26,245 3,890	9,120 0	16,525 10	0 0	600 3,880	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	48,338 6,466 1,373 2,842 5,555 14,193	704 6,227 0 0 0 0	1,501 22 0 0 1,370 29	0 0 0 0	42,073 129 125 2,842 4,185 14,164	0 0 0 0 0	752 0 0 0 0 0	0 0 0 0 0	3,308 88 1,248 0 0
Kentucky, total	188,955	6,591	99,613	0	73,577	0	1,708	0	7,466
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	7,845 588 4,714	2 88 1,413	0 0 871	0 0 0	7,843 0 2,430	0 0 0	0 500 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	4,899 98,213	1,949 0	2,259 95,267	0 0	691 2,946	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	53,102 3,689 3,418 1,840 1,533 9,114	9 3,077 0 0 53 0	956 15 0 146 0 99	0 0 0 0 0	47,496 235 0 1,542 1,379 9,015	0 0 0 0 0	955 0 0 152 101 0	0 0 0 0 0	3,686 362 3,418 0 0
Louisiana, total	223,555	84,315	20,104	0	111,713	0	4,117	0	3,306
Department of Agriculture	43,348 3,124 9,031	31,429 1,383 979	0 53 372	0 0 0	11,879 1,688 7,640	0 0 0	40 0 40	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	28,994 4,319	5,895 0	17,993 0	0 0	5,106 4,319	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	68,012 16,097 1,676 4,962 33,797 10,195	3,751 11,149 0 0 29,729 0	156 1,177 0 0 253 100	0 0 0 0 0	60,082 3,688 0 4,962 3,815 8,534	0 0 0 0 0	4,022 15 0 0 0	0 0 0 0 0	1 68 1,676 0 0 1,561
Maine, total	103,901	10,953	44,317	0	15,190	0	31,050	0	2,391
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	3,943 6,370 9,287 38,861	4 4,156 121 3,215	0 71 6,008 35,646	0 0 0	3,934 1,274 2,557	0 0 0	5 869 601 0	0 0 0	0 0 0
Department of Energy	223	0	0	0	73	0	0	0	150
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	31,072 3,976 565 996 2,701 5,907	3,412 0 0 40 0	2,049 9 0 70 256 208	0 0 0 0 0	1,285 522 0 651 1,048 3,846	0 0 0 0 0	26,346 0 0 275 1,101 1,853	0 0 0 0 0	1,387 33 565 0 256

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Maryland, total	7,964,210	4,766,005	2,054,921	163,223	798,113	0	178,769	0	3,179
Department of Agriculture	138,061 348,425 373,819	130,095 333,109 250,610	206 7,723 73,959	0 0 0	7,738 7,593 43,842	0 0 0	22 0 5,408	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	2,342,076 58,127	1,254,504 27,684	919,729 10,387	0 0	162,139 11,099	0 0	5,623 8,957	0	81 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	3,233,290 12,348 24,572 8,056 1,364,748 60,688	2,370,500 11,811 3,249 0 381,677 2,766	266,992 80 13,145 3,029 754,560 5,111	163,223 0 0 0 0 0	380,322 432 6,519 4,742 131,214 42,473	0 0 0 0 0	51,323 0 0 125 96,973 10,338	0 0 0 0 0	930 25 1,659 160 324 0
Massachusetts, total	3,112,271	301,193	991,701	0	823,426	221,292	706,800	63,007	4,852
Department of Agriculture	22,399 44,145 280,359	15,920 30,771 50,322	472 8,600 93,833	0 0 0	6,007 4,274 86,755	0 0 31,831	0 500 17,243	0 0 375	0 0 0
development <sup>3</sup>	1,159,627 100,568	140,570 0	732,937 17,640	0 0	17,976 76,369	189,205 0	16,307 6,559	62,632 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,124,925 6,062 38,016 19,434 143,063 173,673	1,452 4,255 31,922 0 24,983 998	89,333 342 3,964 3,325 24,363 16,892	0 0 0 0 0	435,429 1,209 113 6,457 43,498 145,339	0 0 0 0 256 0	596,604 0 55 9,125 49,963 10,444	0 0 0 0 0	2,107 256 1,962 527 0
Michigan, total	748,443	111,457	160,127	0	450,082	0	17,989	0	8,788
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	21,110 24,263 67,289	6,829 6,936 24,033	0 14,607 18,973	0 0 0	14,275 1,878 23,457	0 0 0	6 442 826	0 0 0	0 400 0
development <sup>3</sup> Department of Energy	163,625 15,880	63,338 0	84,081 0	0	13,111 15,750	0 0	3,095 130	0	0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	306,905 10,130 7,487 18,849 30,304 82,601	736 9,585 0 0 0	13,063 9 2,330 4,671 19,564 2,829	0 0 0 0 0	284,935 457 149 9,385 8,158 78,527	0 0 0 0 0	5,235 0 1,635 2,793 2,582 1,245	0 0 0 0 0	2,936 79 3,373 2,000 0
Minnesota, total	807,083	38,437	472,522	0	196,262	0	93,791	0	6,071
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total  development <sup>3</sup>	22,693 4,578 26,472 466,327	15,028 180 433 1,559	0 2,926 15,966 440,578	0 0 0	7,658 1,472 8,469 1,683	0 0 0	7 0 1,604 22,507	0 0 0	0 0 0
Department of Energy	6,564	0	0	0	6,561	0	3	0	Ő
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	211,333 8,049 5,339 14,718 8,093 32,917	685 7,502 0 12,750 300 0	7,208 7 15 438 4,583 801	0 0 0 0	131,030 499 2,368 1,530 3,170 31,822	0 0 0 0 0	69,336 0 0 0 40 294	0 0 0 0 0	3,074 41 2,956 0 0

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Mississippi, total	280,366	132,896	70,301	0	67,535	0	7,886	0	1,748
Department of Agriculture	60,342 6,275 50,938	42,681 5,727 35,664	0 78 3,060	0 0 0	16,868 470 12,206	0 0 0	793 0 8	0 0 0	0000
development <sup>3</sup> Department of Energy	81,929 1,833	41,370 0	35,832 376	0 0	4,727 1,457	0 0	0 0	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	13,914 6,320 1,923 1,542 47,604 7,746	5,677 393 0 1,383	145 22 0 0 30,788 0	0 0 0 0 0	13,642 539 0 1,542 8,338 7,746	0 0 0 0 0	115 0 0 0 6,970 0	0 0 0 0 0	11 82 1,530 0 125
Missouri, total	930,735	48,544	560,924	0	294,459	0	22,202	0	4,606
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	20,374 1,012 35,085	9,681 343 10,896	0 0 15,365	0 0 0	10,693 85 8,824	0 0 0	0 415 0	0 0 0	0 169 0
development <sup>3</sup> Department of Energy	546,438 4,727	13,762 21	531,964 340	0 0	712 4,356	0 0	0 10	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	264,584 13,171 2,779 2,816 16,251 23,498	634 12,484 6 0 717 0	1,777 11 150 250 10,667 400	0 0 0 0 0	239,788 562 0 2,506 4,864 22,069	0 0 0 0 0	20,606 0 79 60 3 1,029	0 0 0 0 0	1,779 114 2,544 0 0
Montana, total	80,670	33,101	9,897	0	32,949	0	3,149	0	1,574
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	17,657 5,091 5,517	11,597 53 15	15 0 576	0 0 0	4,665 4,738 4,926	0 0 0	1,380 300 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	7,276 984	2,606 0	4,670 35	0 0	0 875	0 0	0 0	0 0	74
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	12,861 14,887 1,229 321 6,177 8,670	5,011 13,794 0 0 25 0	714 31 0 0 3,437 419	0 0 0 0 0	5,764 841 100 321 2,579 8,140	0 0 0 0 0	1,222 0 0 0 136 111	0 0 0 0 0	150 221 1,129 0 0
Nebraska, total	84,982	28,873	2,104	0	46,328	0	6,572	0	1,105
Department of Agriculture	27,427 744 4,838	19,297 106 473	0 0 762	0 0 0	8,130 38 3,603	0 0 0	0 600 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	2,779 705	2,302 0	406 0	0 0	71 705	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	30,566 6,956 905 250 2,305 7,507	12 6,683 0 0 0	602 0 0 0 234 100	0 0 0 0 0	23,837 194 52 220 2,071 7,407	0 0 0 0 0	5,942 0 0 30 0	0 0 0 0	173 79 853 0 0

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State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Nevada, total	290,853	48,514	211,316	0	25,268	0	4,107	0	1,648
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	2,869 115 11,964	436 0 8,897	0 2 1,230	0 0 0	2,398 113 1,837	0 0 0	35 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	31,789 194,692	17,456 10	13,906 191,035	0 0	427 2,865	0 0	0 782	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	9,894 9,508 4,946 14,637 2,914 7,525	11 8,488 0 12,750 466 0	216 0 2,039 1,155 1,733 0	0 0 0 0 0	7,915 881 68 584 655 7,525	0 0 0 0 0	1,342 0 1,948 0 0	0 0 0 0 0	410 139 891 148 60 0
New Hampshire, total	269,132	33,959	163,677	0	69,064	0	1,669	0	763
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	4,673 7,824 45,282	2,562 5 9,261	0 1,705 31,731	0 0 0	2,109 6,114 3,715	0 0 0	2 0 575	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	139,110 670	19,096 0	118,169 0	0 0	854 670	0 0	991 0	0 0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	35,610 1,971 2,191 889 18,349 12,563	5 1,824 283 0 350 573	2,769 0 14 0 8,477 812	0 0 0 0 0	32,548 99 1,366 889 9,522 11,178	0 0 0 0 0	101 0 0 0 0	0 0 0 0 0	187 48 528 0 0
New Jersey, total	1,459,570	392,554	784,488	0	218,031	37,387	17,106	6,082	3,922
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	7,226 23,458 114,869	19 15,892 37,155	0 3,272 54,270	0 0 0	7,207 3,834 23,260	0 0 115	0 460 17	0 0 52	0 0 0
development <sup>3</sup> Department of Energy	880,567 69,267	298,359 0	573,431 14,369	0 0	2,672 17,401	0 37,272	0 225	6,030 0	75 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	123,404 3,970 107,756 5,044 64,684 59,325	198 3,514 35,365 0 1,902 150	14,454 136 69,185 0 52,483 2,888	0 0 0 0 0	95,006 221 449 2,159 9,647 56,175	0 0 0 0 0	12,755 0 0 2,885 652 112	0 0 0 0 0	991 99 2,757 0 0
New Mexico, total	1,891,565	395,908	170,514	614,018	85,267	608,320	15,147	0	2,391
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	7,431 1,400 87,902 498,879	3,650 43 40,431 318,138	0 1,113 27,892 100,437	0 0 6,616 57,017	3,771 0 9,010 3,032	0 0 3,647 20,255	10 244 306	0 0 0	0 0 0
Department of Energy  Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	1,175,695 46,423 9,351 6,371 4,278 40,943 12,892	9,031 1,693 8,806 0 0 13,630 486	26,171 2,302 60 65 993 10,074 1,407	548,800 0 0 1,333 0 252 0	9,958 32,651 241 394 100 16,179 9,931	574,435 6,122 0 3,370 0 390 101	7,300 2,717 0 0 3,185 418 967	0 0 0 0 0 0 0	938 244 1,209 0 0

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					E:	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
New York, total	2,551,833	191,988	709,033	0	1,121,737	213,181	221,286	0	94,608
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	33,988 18,360 140,444	16,169 972 57,338	102 10,403 30,634	0 0 0	16,721 5,808 49,523	0 27 982	996 550 1,967	0 0 0	0 600 0
development <sup>3</sup> Department of Energy	465,914 553,803	98,642 6,351	352,109 275,480	0 0	12,967 61,593	0 207,628	2,196 2,751	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,076,498 8,200 9,836 8,621 58,805 177,364	1,421 6,377 450 0 4,268	20,820 61 2,122 11 14,263 3,028	0 0 0 0 0	774,425 1,752 1,860 5,749 28,083 163,256	1,749 0 0 0 1,953 842	190,151 0 0 2,861 10,238 9,576	0 0 0 0 0	87,932 10 5,404 0 0 662
North Carolina, total	924,652	235,873	121,168	0	499,001	0	63,610	0	5,000
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	33,582 13,234 67,277	17,100 4,717 18,423	499 5,705 10,568	0 0 0	15,920 2,812 36,551	0 0 0	63 0 1,735	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	73,087 16,848	23,178 425	43,247 0	0 0	6,382 15,251	0 0	280 1,172	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	517,469 7,504 5,095 132,314 13,266 44,977	85,021 5,424 0 81,559 27 0	20,564 1,273 0 35,051 1,609 2,652	0 0 0 0 0	359,319 568 2,023 10,712 8,497 40,966	0 0 0 0 0	50,821 55 0 4,992 3,133 1,359	0 0 0 0 0	1,744 184 3,072 0 0
North Dakota, total	52,088	27,360	376	0	21,036	0	1,145	0	2,171
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	26,003 659 2,001	20,240 99 1	0 0 0	0 0 0	5,763 560 2,000	0 0 0	0 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	555 5,167	200 0	355 0	0 0	0 5,167	0 0	0 0	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	2,872 6,893 1,720 1,100 1,854 3,264	5 6,815 0 0 0	9 12 0 0 0	0 0 0 0 0	2,113 25 0 1,100 1,794 2,514	0 0 0 0 0	335 0 0 0 60 750	0 0 0 0 0	410 41 1,720 0 0 0
Ohio, total	5,562,227	698,173	4,388,253	0	344,724	0	125,380	0	5,697
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup> Department of Energy	15,579 4,387 282,323 4,276,668 16,901	7,067 58 182,980 190,954 0	0 3,074 64,441 4,054,163 7,927	0 0 0	8,156 955 20,743 11,856 8,595	0 0 0	348 300 14,159 19,695 379	0 0 0	8 0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	360,550 5,397 14,638 64,938 482,907 37,939	33,319 4,780 4,941 48,450 225,624 0	15,538 18 4,075 10,272 227,732 1,013	0 0 0 0 0	236,409 427 1,837 3,791 15,208 36,747	0 0 0 0 0	74,237 0 80 1,950 14,053	0 0 0 0 0	1,047 172 3,705 475 290

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Oklahoma, total	175,497	51,038	54,017	0	60,570	0	7,988	0	1,884
Department of Agriculture	17,712 6,642 19,313	10,676 6,472 8,015	0 3 6,667	0 0 0	7,036 167 4,631	0 0 0	0 0 0	0 0 0	0
development <sup>3</sup> Department of Energy	22,127 26,475	9,953 1,424	11,939 21,371	0	235 3,680	0 0	0 0	0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	34,946 5,489 11,787 14,326 3,212 13,468	11 5,217 1,620 7,650 0	919 4 8,307 3,407 1,101 299	0 0 0 0 0	26,018 159 199 3,269 2,111 13,065	0 0 0 0 0	7,884 0 0 0 0 104	0 0 0 0 0	114 109 1,661 0 0
Oregon, total	314,710	87,846	24,915	0	171,995	0	20,849	0	9,105
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	35,129 16,004 13,898	23,735 11,088 0	0 1,608 2,489	0 0 0	11,281 3,053 11,409	0 0 0	113 114 0	0 0 0	0 141 0
development <sup>3</sup> Department of Energy	2,780 34,653	534 27,988	1,394 244	0 0	462 3,696	0 0	390 75	0 0	2,650
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	135,026 12,117 1,834 24,064 9,159 30,046	21 11,533 0 12,780 167 0	9,479 10 10 4,695 3,518 1,468	0 0 0 0 0	101,013 401 543 6,389 5,170 28,578	0 0 0 0 0	19,853 0 0 0 304 0	0 0 0 0 0	4,660 173 1,281 200 0
Pennsylvania, total	1,886,258	132,927	702,304	219	853,437	16,884	173,970	0	6,517
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	42,490 5,924 161,383	30,989 109 1,599	113 3,550 62,168	0 0 0	11,210 653 80,227	0 0 16,744	178 1,612 645	0 0 0	0
development <sup>3</sup> Department of Energy	426,151 340,893	27,909 44,828	328,862 257,371	0 0	35,613 25,959	140 0	33,627 12,735	0 0	(
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	725,576 8,140 9,039 4,751 51,497 110,414	19,222 6,223 123 0 1,925	16,201 169 1,169 136 31,809 756	0 0 219 0 0	573,450 1,482 1,371 4,615 16,856 102,001	0 0 0 0 0	116,609 0 0 0 907 7,657	0 0 0 0 0	94 266 6,157 0 0
Rhode Island, total	385,411	222,106	78,082	0	60,182	0	22,978	0	2,063
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	1,835 3,727 31,024 260,829	1,054 20,924 188,055	0 493 1,905 72,774	0 0 0	1,757 2,180 8,137	0 0 0	76 0 58	0 0 0	0 0 0
Department of Energy	2,356	0	0	ő	2,351	0	5	0	Ö
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	49,613 2,477 1,001 12,007 3,308 17,234	5 1,561 50 10,199 256 0	1,260 0 300 1,250 0 100	0 0 0 0 0	25,318 916 0 524 2,841 16,158	0 0 0 0 0	21,618 0 0 34 211 976	0 0 0 0 0	1,412 0 651 0 0

### [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
South Carolina, total	186,221	44,872	22,122	18,191	92,443	0	2,583	692	5,318
Department of Agriculture	14,864 10,699 15,092	8,443 8,085 937	0 61 4,851	0 0 0	6,110 2,553 9,270	0 0 0	0 0 34	0 0 0	311 0 0
development <sup>3</sup> Department of Energy	37,177 28,331	22,368 1	12,130 888	0 18,191	1,033 8,537	0 0	954 714	692 0	0 0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	50,813 4,501 1,812 2,312 3,296 17,324	16 3,672 0 0 1,350	3,570 191 0 0 31 400	0 0 0 0 0	44,686 162 51 1,862 1,890 16,289	0 0 0 0 0	275 0 0 0 25 581	0 0 0 0 0	2,266 476 1,761 450 0 54
South Dakota, total	46,003	27,501	6,083	0	9,429	0	2,125	0	865
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	7,007 677 1,349	4,018 102 334	0 0 343	0 0 0	2,989 0 672	0 0 0	0 575 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	450 50	395 0	55 0	0 0	0 50	0 0	0 0	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	2,578 13,526 781 275 15,950 3,360	740 8,631 0 0 13,281	365 4,846 16 0 40 418	0 0 0 0 0	1,323 49 0 275 1,129 2,942	0 0 0 0 0	50 0 0 0 1,500 0	0 0 0 0 0	100 0 765 0 0
Tennessee, total	621,155	37,925	54,239	307,181	181,024	10,256	27,685	0	2,845
Department of Agriculture	8,712 1,598 17,381	1 886 1,972	0 0 4,843	0 0 3,065	8,711 187 7,499	0 0 0	0 525 2	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	47,443 319,786	20,052 1,604	14,034 13,459	12,577 286,521	780 8,078	0 9,975	0 149	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	168,671 6,193 4,382 1,467 29,971 15,551	1,812 5,154 282 0 5,957 205	3,984 12 196 149 16,653 909	0 0 1,390 0 3,628 0	135,644 994 0 1,318 3,435 14,378	281 0 0 0 0 0	26,950 0 0 0 0 59	0 0 0 0 0	0 33 2,514 0 298 0
Texas, total	4,110,756	596,978	2,741,834	0	691,377	0	69,230	1,496	9,841
Department of Agriculture	63,664 12,545 166,667 933,699	47,422 2,590 56,786 75,692	0 4,185 69,704 831,541	0 0 0	16,221 5,770 37,621 22,048	0 0 0	10 0 2,556 2,839	0 0 0 1,496	11 0 0 83
Department of Energy  Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	22,885 523,738 23,049 12,444 14,976 2,265,388 71,701	2,036 18,873 0 0 393,579	1,266 14,480 718 3,746 1,601 1,812,232 2,361	0 0 0 0 0 0	21,270 477,396 3,215 409 11,175 27,930 68,322	0 0 0 0 0 0	349 28,981 83 0 2,000 31,394 1,018	0 0 0 0 0 0	0 845 160 8,289 200 253 0

### [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Utah, total	392,807	135,365	111,547	0	142,514	0	1,296	0	2,085
Department of Agriculture	13,527 2,293 19,258	8,153 84 6,776	0 1,502 5,039	0 0 0	5,373 232 7,443	0 0 0	1 0 0	0 0 0	0 475 0
development <sup>3</sup> Department of Energy	221,015 8,000	113,144 0	95,044 865	0 0	12,827 6,800	0 0	0 0	0	0 335
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	78,397 7,802 852 1,208 16,306 24,149	40 6,802 0 0 366 0	4,316 54 25 70 3,919 713	0 0 0 0 0	72,863 636 0 1,138 12,021 23,181	0 0 0 0 0	1,040 0 0 0 0 255	0 0 0 0 0	138 310 827 0 0
Vermont, total	57,596	4,171	12,827	0	37,865	0	1,483	0	1,250
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total	5,418 776 2,315	1,679 126 743	0 0 237	0 0 0	3,739 40 1,335	0 0 0	0 610 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	11,325 584	372 0	10,896 141	0 0	57 370	0 0	0 73	0	0 0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	29,291 1,378 497 743 699 4,570	5 1,246 0 0 0 0	496 8 0 0 556 493	0 0 0 0 0	28,020 84 0 143 4,077	0 0 0 0 0	620 0 0 180 0	0 0 0 0 0	150 40 497 563 0
Virginia, total	4,667,864	1,480,464	2,694,070	879	244,283	61,895	43,793	135,732	6,748
Department of Agriculture  Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	9,580 13,022 378,068	801 4,439 105,043	0 6,876 228,092	0 0 183	7,917 1,482 30,078	0 0 0	862 225 6,060	0 0 8,612	0 0 0
development <sup>3</sup> Department of Energy	3,299,279 86,785	1,035,758 12,254	2,124,529 3,664	696 0	16,108 8,398	150 61,745	3,428 724	118,610 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	167,903 43,493 30,455 21,704 557,914 59,661	4,201 41,904 264 0 271,050 4,750	27,618 580 18,599 15,942 248,826 19,344	0 0 0 0 0	121,857 891 2,310 1,902 21,057 32,283	0 0 0 0 0	12,657 46 1,200 3,860 11,545 3,186	546 0 4,894 0 2,972 98	1,024 72 3,188 0 2,464
Washington, total	1,244,174	183,685	427,331	0	355,630	0	121,688	149,770	6,070
Department of Agriculture	36,264 61,629 44,902 376,187	23,367 55,976 3,558 82,953	0 1,980 16,807 286,172	0 0 0	12,728 3,174 20,721 3,443	0 0 0	159 89 1,263 419	0 0 2,553 3,200	10 410 0
Department of Energy	161,184	118	5,603	0	17,726	0	263	137,474	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	381,681 11,445 5,148 5,272 109,947 50,515	7,787 9,151 0 0 748 27	15,581 19 1,577 0 97,044 2,548	0 0 0 0 0	234,239 2,001 15 4,035 10,484 47,064	0 0 0 0 0	115,911 0 0 1,037 1,671 876	5,276 0 1,267 0 0 0	2,887 274 2,289 200 0

### [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
West Virginia, total	242,844	96,682	84,815	0	26,830	30,448	868	0	3,201
Department of Agriculture	20,579 647 5,992	16,276 97 0	0 0 3,555	0 0 0	3,888 550 2,437	0 0 0	38 0 0	0 0 0	377 0 0
development <sup>3</sup> Department of Energy	12,076 101,577	446 46,610	11,627 49,956	0	0 4,165	0 0	721	0	125
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	39,299 7,089 2,453 187 18,286 34,659	26,654 6,599 0 0 0	2,988 12 1,117 0 11,603 3,957	0 0 0 0 0	8,691 114 150 0 6,581 254	0 0 0 0 0 30,448	0 0 0 7 102 0	0 0 0 0 0	966 364 1,186 180 0
Wisconsin, total	332,203	38,021	16,017	0	265,640	0	8,233	0	4,292
Department of Agriculture	34,177 4,547 8,092	24,555 517 287	11 1,875 992	0 0 0	9,594 2,155 6,813	0 0 0	17 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	3,906 20,031	402 0	2,390 0	0	1,114 19,511	0 0	0 520	0 0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	185,558 12,733 2,952 1,988 14,615 43,604	7 12,253 0 0 0 0	6,057 5 27 125 3,967 568	0 0 0 0 0	170,526 374 712 1,300 10,530 43,011	0 0 0 0 0	7,478 0 0 75 118 25	0 0 0 0 0	1,490 101 2,213 488 0
Wyoming, total	33,549	11,991	1,108	0	16,758	0	2,827	0	865
Department of Agriculture	6,833 24 2,697	4,685 0 96	0 0 0	0 0 0	2,144 24 2,601	0 0 0	4 0 0	0 0 0	0 0 0
development <sup>3</sup> Department of Energy	254 3,787	101 0	0 0	0 0	153 964	0 0	0 2,823	0	0
Department of Health & Human Svcs Department of the Interior Department of Transportation Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,938 7,454 1,778 450 850 7,484	7,105 0 0 0 0	292 0 125 0 412 279	0 0 0 0 0	1,617 271 891 450 438 7,205	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	25 78 762 0 0
Outlying areas, total <sup>4</sup>	111,908	40,238	16,847	0	46,129	8,058	0	0	636
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Defense, total development <sup>3</sup>	13,273 1,029 2,453 43,496	5,063 620 500 26,700	0 0 0 16,796	0 0 0	8,210 408 1,953	0 0 0	0 0 0	0 0 0	0 1 0
Department of Energy	841	0	0	0	841	0	0	0	0
Department of Health & Human Svcs  Department of the Interior  Department of Transportation  Environmental Protection Agency  National Aeronautics and Space Admin  National Science Foundation	26,837 6,575 530 157 3,755 12,962	682 6,243 430 0 0	36 15 0 0 0	0 0 0 0 0	25,484 317 100 157 3,755 4,904	0 0 0 0 0 8,058	0 0 0 0 0	0 0 0 0 0	635 0 0 0 0

#### [Dollars in thousands]

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					E	xtramural			
State and agency	Total	Intra- mural <sup>1</sup>	Industrial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Puerto Rico, total <sup>4</sup>	61,938	7,476	51	0	45,718	8,058	0	0	635
Department of Agriculture Department of Commerce Department of Defense, research <sup>2</sup> Department of Energy Department of Health & Human Svcs	13,273 994 1,953 841 26,837	5,063 616 0 0 682	0 0 0 0 36	0 0 0 0	8,210 378 1,953 841 25,484	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 635
Department of the Interior Environmental Protection Agency National Aeronautics and Space Admin National Science Foundation	1,166 157 3,755 12,962	1,115 0 0 0	15 0 0 0	0 0 0 0	36 157 3,755 4,904	0 0 0 8,058	0 0 0 0	0 0 0 0	0 0 0 0
Other areas, total <sup>4</sup> Department of Commerce  Department of Defense, research <sup>2</sup> Department of Defense, total	49,970 35 500	32,762 4 500	16,796 0 0	0 0 0	411 30 0	0 0 0	0 0 0	0 0 0	1 1 0
development <sup>3</sup>	43,496 5,409	26,700 5,128	16,796 0	0 0	0 281	0 0	0 0	0 0	0 0
Department of TransportationNational Science Foundation	530 0	430 0	0 0	0 0	100 0	0 0	0 0	0	0 0
Offices abroad, total	18,222	15,434	2,487	0	301	0	0	0	0
Department of Agriculture Department of Defense, research <sup>2</sup> Department of Defense, total	3,132 1,998	3,132 1,937	0	0 0	0 61	0 0	0 0	0 0	0
development <sup>3</sup>	13,092	10,365	2,487	0	240	0	0	0	0

<sup>1</sup> Includes costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

<sup>4</sup> Outlying areas, total represents the sum of Puerto Rico, total and Other areas, total.

NOTE: Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 98 percent of total Federal R&D and R&D plant obligations in fiscal year 1998.

**KEY:** FFRDCs = Federally funded research and development centers

Beginning with Vol. 40, Department of Defense (DoD) research is reported separately from DoD development. DoD states that more than 90 percent of its development reported for "universities and colleges" is performed at off-campus, university-affiliated laboratories that are not involved in teaching.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems. Geographic data for these categories are not reported; therefore, this table shows only total development.

## Table C-86. Federal obligations for R&D plant for selected agencies, by State and category of performer supported: fiscal year 1998

#### [Dollars in thousands]

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						Extramural			
State	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts
Total	1,836,657	471,879	487,608	45,581	139,496	663,620	10,867	12,148	5,458
AlabamaAlaska Arizona Arkansas California	38,625 3,766 7,523 18,537 426,377	88 3,766 672 18,537 26,446	38,385 0 0 0 34,771	0 0 0 0	152 0 2,851 0 55,059	0 0 4,000 0 310,101	0 0 0 0	0 0 0 0	0 0 0 0
Colorado Connecticut Delaware District of Columbia Florida	65,220 2,558 789 13,187 66,355	7,728 0 104 3,109 9,086	44,278 3 575 6,878 54,998	0 0 0 0	835 2,320 0 200 2,271	9,641 0 0 0 0	0 235 110 3,000 0	2,738 0 0 0 0	0 0 0 0
Georgia	3,776 3,935 11,465 152,587 3,084	2,531 2,982 1,043 3,022 149	5 0 9,805 1,549 0	0 0 366 0 0	1,072 67 251 16,090 2,935	0 0 0 131,482 0	0 886 0 444 0	0 0 0 0	168 0 0 0
lowa Kansas Louisiana Maine Maryland	7,177 556 30,406 1,573 307,397	2,783 256 3,701 0 273,574	0 0 25,669 0 29,774	0 0 0 0 1,500	517 300 1,036 573 2,549	3,877 0 0 0 0	0 0 0 1,000 0	0 0 0 0	0 0 0 0
Massachusetts	10,687 2,960 3,520 47,561 4,034	1,170 197 899 13,331 319	332 218 2,231 33,868 2,391	0 0 0 0	9,185 2,545 390 362 1,324	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Montana	2,009 850 2,888 2,969 32,094	1,559 850 0 2,855 1,219	0 0 2,667 4 9,371	0 0 0 0	336 0 221 110 2,912	0 0 0 0 13,293	114 0 0 0 9	0 0 0 0	0 0 0 0 5,290
New Mexico New York North Carolina North Dakota Ohio	113,945 122,148 30,430 3,208 91,210	12,252 6,973 161 2,824 11,374	7,943 5,345 27,727 0 78,555	17,301 0 0 0 0	1,255 10,321 2,542 384 1,281	75,194 97,839 0 0	0 1,670 0 0	0 0 0 0	0 0 0 0
Oklahoma	2,600 3,165 17,942 13,958 7,226	1,065 559 2,118 13,204 7,046	487 0 10,095 0 0	0 0 0 0	1,048 1,106 4,903 754 180	0 0 0 0	0 1,500 826 0 0	0 0 0 0	0 0 0 0
South Dakota	586 28,809 35,802 1,480 106	77 116 4,698 180 0	0 0 26,761 0 0	0 26,414 0 0 0	509 995 3,343 1,300 106	0 1,284 0 0	0 0 1,000 0 0	0 0 0 0	0 0 0 0
Virginia Washington West Virginia Wisconsin Wyoming	53,692 14,492 12,595 1,111 666	15,582 3,281 1,042 1,111 237	29,872 22 2,139 0 0	0 0 0 0	743 1,706 0 0 429	7,495 0 9,414 0 0	0 73 0 0	9,410 0 0 0	0

### Table C-86. Federal obligations for R&D plant for selected agencies, by State and category of performer supported: fiscal year 1998

#### [Dollars in thousands]

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			Extramural										
State	Total	Intra- mural <sup>1</sup>	Indus- trial firms	FFRDCs admin by indus- trial firms	Univer- sities and colleges	FFRDCs admin by univs and colleges	Other nonprofit institu- tions	FFRDCs admin by non- profit institu- tions	State and local govts				
Outlying areas Puerto Rico Other areas Offices abroad	3,101 2,211 890 3,920	2,083 2,083 0 3,920		0	128 128 0 0		0 0 0 0	0 0 0 0	0 0 0 0				

#### Federal installations

NOTE:

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 99 percent of total Federal R&D obligations in fiscal year 1998.

KEY: FFRDCs = Federally funded research and development centers

### Table C-87. Federal obligations for R&D plant, by State and selected agency: fiscal year 1998

#### [Dollars in thousands]

State	Total	Dept of Agricul- ture	Dept of Commerce	Dept of Defense	Dept of Energy	Dept of Health & Human Services	Dept of the Interior	Dept of Trans- por- tation	EPA	NASA	National Science Founda- tion
Total	1,836,657	89,788	48,272	65,763	727,096	286,276	1,500	17,617	66,000	350,000	184,345
Alabama Alaska Arizona Arkansas California	38,625 3,766 7,523 18,537 426,377	86 0 672 457 22,838	3,766 0 0	33 0 0 0 640	0 0 0 0 301,286	2 0 0 18,080 7,280	0 0 0 0	0 0 0 0	0 0 0 0	38,352 0 0 0 45,318	152 0 6,851 0 49,015
Colorado Connecticut Delaware District of Columbia Florida	65,220 2,558 789 13,187 66,355	622 0 104 1,570 7,376	7,006 0 0 0 0	0 1 0 0 17	3,796 370 0 231 190	0 1,000 0 200 990	0 0 0 0	1,067 260 0 0	0 0 0 5,280 5,280	102 2 575 1,512 51,331	52,627 925 110 4,394 1,171
Georgia Hawaii Idaho Illinois Indiana	3,776 3,935 11,465 152,587 3,084	1,142 1,447 1,043 2,739 149	0 2,421 0 0 0	5 0 0 1,510 0	0 0 10,171 131,470 664	1,389 0 0 836 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 166 0	1,240 67 251 15,866 2,271
lowa Kansas Louisiana Maine Maryland	7,177 556 30,406 1,573 307,397	2,783 250 2,846 0 7,901	0 0 0 0 19,477	0 0 0 0 12,496	3,877 300 0 0	517 6 855 1,000 238,604	0 0 0 0 5	0 0 0 0	0 0 0 0	0 0 25,669 0 27,865	0 0 1,036 573 1,049
Massachusetts	10,687 2,960 3,520 47,561 4,034	560 197 899 9,177 319	0 0 0 0	679 0 0 190 0	5,226 200 41 162 17	10 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	253 218 2,231 37,832 2,391	3,959 2,345 349 200 1,307
Montana	2,009 850 2,888 2,969 32,094	1,559 850 0 145 0	0 0 0 2,690 0	0 0 0 4 102	0 0 2,667 0 13,530	0 0 0 0 9	0 0 0 0 1,488	0 0 0 0 0 14,290	0 0 0 0	0 0 0 0	450 0 221 130 2,675
New Mexico New York North Carolina North Dakota Ohio	113,945 122,148 30,430 3,208 91,210	252 4,583 161 2,824 251	0 0 0 0	12,000 1 7 0 13,460	92,495 103,385 190 0	0 4,026 944 0 4	0 0 0 0	0 0 0 0 0	0 0 27,720 0 27,720	7,943 244 0 0 48,494	1,255 9,909 1,408 384 1,281
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	2,600 3,165 17,942 13,958 7,226	1,065 559 1,668 0 859	0 0 0 4,304 6,187	0 0 65 8,900 0	398 0 9,596 0	737 2,500 3,245 0 0	0 0 0 0	0 0 0 0	0 0 0 0	89 0 1,766 0 0	311 106 1,602 754 180
South Dakota Tennessee Texas Utah Vermont	586 28,809 35,802 1,480 106	77 0 2,666 180 0	0 0 0 0 0	0 0 188 0 0	0 27,698 170 0 0	0 0 2,231 0 0	0 0 7 0	0 0 0 0	0 0 0 0	0 116 28,598 0 0	509 995 1,942 1,300 106
Virginia Washington West Virginia Wisconsin Wyoming	53,692 14,492 12,595 1,111 666	0 831 1,042 1,111 237	0 2,421 0 0 0	14,045 0 0 0 0	7,495 10,471 1,000 0 0	0 29 0 0	0 0 0 0	2,000 0 0 0 0	0 0 0 0 0	27,772 22 1,139 0 0	2,380 718 9,414 0 429
Outlying areas  Puerto Rico  Other areas  Offices abroad	3,101 2,211 890 3,920	301 301 0 3,390	0 0 0 0	890 0 890 530	0 0 0	1,782 1,782 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	128 128 0 0

Only the following 10 agencies are required to report to this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. The obligations of the 10 major R&D supporting agencies included in this table represent approximately 99 percent of total Federal R&D obligations in fiscal year 1998. NOTE:

KEY:

EPA = Environmental Protection Agency NASA = National Aeronautics & Space Administration

# Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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								гау	e 1 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	17,113,991	7,569,467	44	18,271,626	7,651,896	42	17,641,680	7,551,548	43
Departments:									
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Animal & Plant Hlth Inspection Svc Cooperative State Research,	996,442 4,417 713,986 16,595	588,542 1,707 395,477 11,782	59 39 55 71	1,069,990 4,696 781,384 16,937	633,367 1,765 437,341 11,295	59 38 56 67	1,099,798 5,017 813,518 17,033	654,069 1,821 456,790 12,093	59 36 56 71
Education, & Extension Service	19,923	12,566	63	22,971	13,189	57	24,790	13,870	56
Economic Research Service Food Safety Inspection Service Foreign Agricultural Service Forest Service	63,077 190 971 170,210	39,779 15 971 122,000	63 8 100 72	55,897 190 971 179,810	39,337 15 971 125,000	70 8 100 70	50,588 190 971 179,810	38,737 15 971 125,000	77 8 100 70
Grain Inspection Packers & Stockyards Administration	2,745	550	20	2,745	550	20	3,410	682	20
Nat'l Agricultural Statistics SvcRural Business-Cooperative Svc	3,112 1,216	2,479 1,216	80 100	2,971 1,418	2,486 1,418	84 100	2,971 1,500	2,590 1,500	87 100
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	673,839 8,562 50 226,014 432,176	417,338 6,110 50 146,499 257,642	62 71 100 65 60	728,242 16,332 50 234,791 468,521	447,701 11,654 50 156,308 271,141	61 71 100 67 58	711,507 8,272 50 238,178 455,711	421,527 5,618 50 159,275 247,288	59 68 100 67 54
Information Administration	7,037	7,037	100	8,548	8,548	100	9,296	9,296	100
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	8,278,863 1,529,852 1,864,389 2,900,286 1,752,898	3,043,471 553,856 803,835 1,234,538 448,654	37 36 43 43 26	8,921,810 1,591,000 1,922,352 3,130,953 2,065,481	2,922,058 384,601 764,872 1,326,227 443,845	33 24 40 42 21	7,877,612 1,415,485 1,504,638 2,959,039 1,775,559	2,626,756 313,107 585,836 1,267,054 458,093	33 22 39 43 26
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency	608,414 294,802 17,120 36,674	100,492 215,984 11,424 2,407	17 73 67 7	926,276 269,706 47,633 30,764	101,279 195,884 31,009 197	11 73 65 1	773,620 275,772 53,150 22,865	103,271 198,769 36,183 202	13 72 68 1
Defense Threat Reduction Agency <sup>1</sup>	70,939	0	0	71,932	0	0	81,258	0	0
Joint Staff	53,945 43,235 627,769	1 4,365 113,981	* 10 18	161,241 62,811 495,118	1 5,932 109,543	* 9 22	49,073 58,139 461,682	5,971 113,696	* 10 25
Director	7,281	347	5	5,199	445	9	2,989	467	16
Secretary of Defense	224,157	2,241	1	206,825	2,068	1	219,902	2,199	1
Department of Education	9,551	6,710	70	13,418	7,070	53	35,951	7,454	21
Department of Energy	463,220	119,560	26	572,244	116,950	20	666,550	118,073	18

# Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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								Page	e 2 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
<b>5</b> . <b>5</b> . <b>1</b>	Total	Personnel costs			Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Dept of Health & Human Svcs, total	2,809,392 526 948 36,167	1,205,663 288 563 20,940	43 55 59 58	3,028,807 526 1,219 70,900	1,331,105 288 439 21,593	44 55 36 30	3,224,965 526 1,074 94,849	1,485,327 288 674 25,400	46 55 63 27
Prevention	239,825	203,851	85	272,825	231,901	85	357,052	303,494	85
Food & Drug Administration  Health Care Financing Admin  Health Resources & Services Admin  National Institutes of Health  Office of the Secretary, total	118,796 353 2,960 2,405,001 4,815	106,916 10 2,497 868,540 2,057	90 3 84 36 43	117,459 60 2,693 2,558,824 4,300	105,713 10 2,614 966,246 2,300	90 17 97 38 53	126,245 70 2,817 2,637,763 4,450	113,621 10 2,736 1,036,653 2,450	90 14 97 39 55
Office of the Asst Secretary, Planning & Evaluation Office of Public HIth & Science Substance Abuse & Mental Health	4,538 277	1,780 277	39 100	4,000 300	2,000 300	50 100	4,000 450	2,000 450	50 100
Services Administration <sup>2</sup>	1	1	100	1	1	100	119	1	1
Dept of Housing & Urban Development	16,960	13,000	77	31,293	22,000	70	31,447	22,000	70
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	460,832 6,557 431,030 6,614 16,631	271,741 3,300 249,295 4,851 14,295	59 50 58 73 86	491,462 6,017 461,605 7,211 16,629	289,208 3,300 266,618 4,995 14,295	59 55 58 69 86	511,843 7,865 478,466 7,329 18,183	298,932 3,300 274,899 5,117 15,616	58 42 57 70 86
Department of Justice, total Bureau of Prisons Federal Bureau of Investigation Immigration & Naturalization Svc Office of Justice Programs	39,679 3,000 35,812 0 867	7,266 2,700 4,557 0	18 90 13 0 1	40,986 3,000 36,160 200 1,626	7,322 2,700 4,605 1 16	18 90 13 *	39,711 3,000 36,208 500 3	7,357 2,700 4,653 1 3	19 90 13 *
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	11,023 8,400 155 1,697 60	4,804 2,181 155 1,697 60	44 26 100 100 100	15,135 12,400 164 1,741 60	4,916 2,181 164 1,741 60	32 18 100 100 100	15,489 12,400 168 1,817 60	5,270 2,181 168 1,817 60	34 18 100 100 100
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	251 460	251 460	100 100	266 504	266 504	100 100	269 775	269 775	100 100
Department of State <sup>3</sup>	324	324	100	327	327	100	327	327	100
Department of Transportation, total Coast Guard Federal Aviation Administration Federal Highway Administration Federal Railroad Administration	190,793 12,789 92,636 39,565 9,516	109,886 7,000 82,282 4,755 1,553	58 55 89 12 16	224,036 11,737 69,513 80,085 12,759	106,029 7,200 69,513 10,792 1,805	47 61 100 13 14	286,199 13,484 73,110 137,359 12,965	112,050 7,470 73,110 11,744 1,956	39 55 100 9 15
Federal Transit Administration	2,303	2,303	100	2,385	2,385	100	2,475	2,475	100
National Highway Traffic Safety Administration Office of the Secretary Research & Special Programs Admin	26,637 3,433 3,914	8,790 1,736 1,467	33 51 37	32,224 9,631 5,702	10,634 1,646 2,054	33 17 36	37,576 4,475 4,755	12,400 1,216 1,679	33 27 35
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service	43,553 2,799 36,902 684 2,884	39,702 327 35,688 519 2,884	91 12 97 76 100	44,104 2,368 37,647 766 2,909	40,230 160 36,177 570 2,909	91 7 96 74 100	44,842 2,424 38,059 855 3,040	41,161 86 36,931 640 3,040	92 4 97 75 100
United States MintUnited States Secret Service	1 283	1 283	100 100	51 363	51 363	100 100	75 389	75 389	100 100
Department of Veterans Affairs	277,094	157,924	57	320,477	185,875	58	316,000	189,600	60

## Table C-88. Federal obligations for total research and development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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								9	
		1998				Prelin	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Other agencies:									
Appalachian Regional Commission Consumer Product Safety Commission Environmental Protection Agency Federal Communications Commission Federal Trade Commission	15 0 254,988 3,025 1,144	15 0 254,988 3,025 860	100 0 100 100 75	1 90 241,629 4,178 1,097	1 90 241,629 4,178 821	100 100 100 100 75	1 264 230,455 2,747 1,379	1 264 230,455 2,747 1,031	100 100 100 100 75
Internat'l Development Cooperation Agency, total Agcy for Internat'l Development <sup>4</sup> Library of Congress National Aeronautics & Space Admin National Archives & Records Admin	22,560 22,560 880 2,395,500 120	17,702 17,702 708 1,193,409 120	78 78 80 50 100	23,479 23,479 1,231 2,330,500 120	17,611 17,611 875 1,156,634 120	75 75 71 50 100	23,146 23,146 1,319 2,346,073 120	16,271 16,271 881 1,189,774 120	70 70 67 51 100
National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Social Security Administration Tennessee Valley Authority	16,954 14,301 120,000 2,336 2,655	11,866 12,015 78,000 2,336 2,023	70 84 65 100 76	18,625 14,467 122,000 4,855 0	13,039 12,698 79,300 4,855 0	70 88 65 100 0	20,026 14,251 129,000 3,414 0	14,019 12,590 83,850 3,414 0	70 88 65 100 0
US Arms Control & Disarmament Agcy <sup>3</sup> United States Information AgencyUS International Trade Commission	525 258 7,165	200 6 6,263	38 2 87	50 100 6,873	50 5 5,832	100 5 85	0 100 7,144	0 5 6,223	0 5 87

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Because of rounding, detail may not add to totals.

**KEY:** \* = Amount less than .05 percent

Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-89. Federal obligations for total basic research to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

Page 1 of 2

								Page	e 1 of 2
		1998				Prelin	ninary		
Agency and subdivision			Per-		1999			2000	
<b>,</b>	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	2,917,780	1,293,059	44	3,107,467	1,406,497	45	3,336,199	1,512,027	45
Departments:									
Department of Agriculture, total	421,443	240,518	57	465,963	266,643	57	483,146	277,157	57
	378,413	209,603	55	421,948	236,164	56	439,300	246,667	56
Education, & Extension Service Economic Research Service Food Safety Inspection Service	8,576	5,278	62	9,856	5,539	56	10,621	5,825	55
	7,155	4,512	63	6,497	4,572	70	5,563	4,260	77
	125	10	8	125	10	8	125	10	8
Foreign Agricultural Service	721	721	100	721	721	100	721	721	100
Forest Service	25,356	19,520	77	25,756	18,750	73	25,756	18,750	73
Nat'l Agricultural Statistics Svc	1,097	874	80	1,060	887	84	1,060	924	87
Department of Commerce, total Bureau of the Census Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin	35,394	24,450	69	41,152	26,424	64	40,259	26,573	66
	550	374	68	1,049	713	68	531	408	77
	34,639	24,075	70	36,709	25,710	70	36,279	26,164	72
	205	1	*	3,394	1	*	3,449	1	*
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies, total	309,521	104,648	34	306,745	111,947	36	354,956	115,816	33
	85,523	9,233	11	71,432	8,157	11	89,200	8,539	10
	87,492	37,684	43	82,476	41,084	50	102,390	40,913	40
	109,119	47,925	44	120,484	52,917	44	130,816	57,454	44
	27,387	9,806	36	32,353	9,789	30	32,550	8,910	27
Defense Adv Rsch Projects Agcy	6,367	4,775	75	4,588	3,441	75	5,094	3,821	75
Washington Headquarters Svcs	21,020	5,031	24	27,765	6,348	23	27,456	5,089	19
Department of Education	146	103	71	135	95	70	95	68	72
Department of Energy	46,895	9,706	21	45,322	3,336	7	66,032	3,450	5
Dept of Health & Human Svcs, total	1,263,026	456,799	36	1,343,794	508,121	38	1,385,270	545,120	39
Health Resources & Services Admin	1,050	1,050	100	1,102	1,102	100	1,157	1,157	100
National Institutes of Health	1,261,976	455,749	36	1,342,692	507,019	38	1,384,113	543,963	39
Department of the Interior, total	45,384	26,676	59	47,426	27,955	59	48,503	28,478	59
	45,344	26,661	59	47,386	27,940	59	48,463	28,463	59
	40	15	38	40	15	38	40	15	38
Department of Justice, total Office of Justice Programs	250 250	2 2	1 1	275 275	2 2	1 1	1	1 1	100 100
Department of Labor, total	7,100	1,221	17	11,100	1,221	11	11,100	1,221	11
	7,100	1,221	17	11,100	1,221	11	11,100	1,221	11
Department of Transportation, total	8,458	1,539	18	11,999	1,632	14	26,131	1,762	7
Federal Highway Administration	8,458	1,539	18	11,999	1,632	14	26,131	1,762	7
Department of the Treasury, totalBureau of Engraving & Printing	34	29	85	38	15	39	28	7	25
	34	29	85	38	15	39	28	7	25
Department of Veterans Affairs	120,015	68,390	57	139,855	81,115	58	137,500	82,500	60

## Table C-89. Federal obligations for total basic research to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

Page 2 of 2

								- 3		
		1998		Preliminary						
Agency and subdivision			Per-	1999			2000			
Other agencies:	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total	
Other agencies:										
Environmental Protection AgencyInternat'l Development Cooperation	17,095	17,095	100	22,534	22,534	100	22,080	22,080	100	
Agency, total	218 218 506,613 16,140	159 159 252,388 11,297	73 73 50 70	8 8 531,354 17,767	6 6 263,713 12,438	75 75 50 70	13 13 612,938 19,147	9 9 310,531 13,404	69 69 51 70	
Smithsonian Institution	120,000 48	78,000 39	65 81	122,000 0	79,300 0	65 0	129,000 0	83,850 0	65 0	

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Because of rounding, detail may not add to totals.

**KEY:** \* = Amount less than .05 percent

Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

### [In thousands of dollars and percentages]

Page 1 of 3

								raye	e 1 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	5,046,947	2,948,390	58	5,332,631	3,073,776	58	5,439,527	3,098,573	57
Departments:									
Department of Agriculture, total Agricultural Marketing Service Agricultural Research Service Cooperative State Research.	. 3,714	290,223 1,486 150,281	61 40 55	490,909 4,000 289,112	300,391 1,533 161,816	61 38 56	499,961 4,268 301,002	307,913 1,577 169,012	62 37 56
Education, & Extension Service Economic Research Service		7,288 35,267	64 63	13,115 49,400	7,650 34,765	58 70	14,169 45,025	8,045 34,477	57 77
Foreign Agricultural Service		250 92,720	100 72	250 131,154	250 91,250	100 70	250 131,154	250 91,250	100 70
Stockyards Administration Nat'l Agricultural Statistics Svc Rural Business-Cooperative Svc	. 2,015	110 1,605 1,216	20 80 100	549 1,911 1,418	110 1,599 1,418	20 84 100	682 1,911 1,500	136 1,666 1,500	20 87 100
Department of Commerce, total Bureau of the Census Economic Development Admin Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	4,616 50 175,285	359,188 3,255 50 110,800 241,317	61 71 100 63 59	639,295 8,805 50 181,737 444,820	394,292 6,209 50 118,253 265,897	62 71 100 65 60	626,475 4,460 50 185,052 430,719	372,324 3,522 50 120,445 242,113	59 79 100 65 56
Information Administration	. 3,766	3,766	100	3,883	3,883	100	6,194	6,194	100
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	308,887 367,496 213,902	681,210 243,964 246,532 123,999 66,715	62 79 67 58 32	1,120,843 308,225 375,327 234,573 202,718	685,084 257,159 219,028 135,982 72,915	61 83 58 58 36	1,084,107 284,470 359,848 229,089 210,700	634,961 196,591 233,606 132,803 71,961	59 69 65 58 34
Ballistic Missile Defense Org Defense Adv Rsch Projects Agcy Defense Info Systems Agcy Defense Logistics Agency Defense Threat Reduction	. 61,854 1,094	3,485 46,391 1 1	14 75 *	21,559 69,975 2,389 6,761	3,780 52,481 1 1	18 75 *	11,013 75,907 1,966 8,261	734 56,930 1 1	7 75 *
Agency 1	. 61,136	0	0	54,831	0	0	61,083	0	0
Special Operations Command Washington Headquarters Svcs		133 16,704	3 35	5,653 41,550	152 16,500	3 40	5,232 47,238	121 14,174	2 30
Department of Education	6,851	4,815	70	7,729	4,652	60	12,920	4,417	34
Department of Energy	136,110	27,234	20	184,345	26,223	14	244,992	40,111	16

Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

Page 2 of 3

								Page	e 2 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Dept of Health & Human Svcs, total Administration on Aging Admin for Children & Families Agcy for Hlth Care Policy & Rsch Centers for Disease Control &	1,174,521 185 948 28,467	609,372 57 563 13,240	52 31 59 47	1,287,494 185 1,219 60,800	666,300 57 439 11,493	52 31 36 19	1,431,076 185 1,074 85,849	773,831 57 674 16,400	54 31 63 19
Prevention	239,825	203,851	85	272,825	231,901	85	357,052	303,494	85
Food & Drug Administration Health Care Financing Admin Health Resources & Services Admin National Institutes of Health Office of the Secretary, total Office of the Asst Secretary,	118,796 353 1,910 779,499 4,538	106,916 10 1,447 281,508 1,780	90 3 76 36 39	117,459 60 1,591 829,355 4,000	105,713 10 1,512 313,175 2,000	90 17 95 38 50	126,245 70 1,660 854,941 4,000	113,621 10 1,579 335,996 2,000	90 14 95 39 50
Planning & Evaluation	4,538	1,780	39	4,000	2,000	50	4,000	2,000	50
Dept of Housing & Urban Development	6,263	5,000	80	11,493	8,000	70	12,277	8,000	65
Department of the Interior, total Bureau of Reclamation Geological Survey Minerals Management Service National Park Service	390,879 5,557 362,117 6,614 16,591	231,551 3,000 209,420 4,851 14,280	59 54 58 73 86	418,305 5,017 389,488 7,211 16,589	246,992 3,000 224,717 4,995 14,280	59 60 58 69 86	435,265 6,365 403,428 7,329 18,143	255,270 3,000 231,552 5,117 15,601	59 47 57 70 86
Department of Justice, total Bureau of Prisons Office of Justice Programs	3,116 2,500 616	2,306 2,300 6	74 92 1	3,850 2,500 1,350	2,313 2,300 13	60 92 1	2,501 2,500 1	2,301 2,300 1	92 92 100
Department of Labor, total Bureau of Labor Statistics Employment & Training Admin Occupational Safety & Hlth Admin Office of the Secretary	3,589 1,300 47 1,697 30	3,249 960 47 1,697 30	91 74 100 100 100	3,682 1,300 50 1,741 30	3,342 960 50 1,741 30	91 74 100 100 100	4,028 1,300 51 1,817 30	3,688 960 51 1,817 30	92 74 100 100 100
Pension Benefit Guaranty Corp Pension & Welfare Benefits Admin	55 460	55 460	100 100	57 504	57 504	100 100	55 775	55 775	100 100
Department of State <sup>2</sup>	324	324	100	327	327	100	327	327	100
Department of Transportation, total  Coast Guard  Federal Aviation Administration  Federal Highway Administration  Federal Railroad Administration	96,084 3,285 31,506 21,959 9,360	45,555 2,100 31,506 138 1,473	47 64 100 1 16	113,592 3,000 37,125 24,476 12,609	59,775 2,160 37,125 5,895 1,725	53 72 100 24 14	141,426 3,237 46,219 38,220 12,815	71,044 2,260 46,219 6,459 1,876	50 70 100 17 15
Federal Transit Administration National Highway Traffic Safety	400	400	100	600	600	100	500	500	100
AdministrationResearch & Special Programs Admin	26,637 2,937	8,790 1,148	33 39	32,224 3,558	10,634 1,636	33 46	37,576 2,859	12,400 1,330	33 47
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service Office of Thrift Supervision United States Customs Service United States Secret Service	38,712 2,642 35,053 684 50 283	35,090 199 34,039 519 50 283	91 8 97 76 100 100	39,247 2,198 35,845 766 75 363	35,674 91 34,575 570 75 363	91 4 96 74 100 100	39,829 2,286 36,199 855 100 389	36,451 51 35,271 640 100 389	92 2 97 75 100 100
Department of Veterans Affairs	149,051	84,959	57	171,294	99,350	58	169,500	101,700	60
									L

### Table C-90. Federal obligations for total applied research to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

Page 3 of 3

		1998			Prelin	ninary			
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Other agencies:									
Appalachian Regional Commission	15 0 229,834 3,025 1,144	15 0 229,834 3,025 860	100 0 100 100 75	1 0 211,122 4,178 1,097	1 0 211,122 4,178 821	100 0 100 100 75	1 168 200,830 2,747 1,379	1 168 200,830 2,747 1,031	100 100 100 100 75
Internat'l Development Cooperation Agency, total	18,822 18,822 455 597,779 120	14,305 14,305 357 297,806 120	76 76 78 50 100	17,946 17,946 595 577,964 120	13,461 13,461 472 286,845 120	75 75 79 50 100	17,073 17,073 614 486,123 120	11,717 11,717 491 246,283 120	69 69 80 51 100
National Science Foundation  Nuclear Regulatory Commission  Social Security Administration  Tennessee Valley Authority  US Arms Control & Disarmament Agcy <sup>2</sup>	814 14,301 2,336 761 525	569 12,015 2,336 603 200	70 84 100 79 38	858 14,467 4,855 0 50	601 12,698 4,855 0 50	70 88 100 0 100	879 14,251 3,414 0 0	615 12,590 3,414 0 0	70 88 100 0
United States Information AgencyUS International Trade Commission	258 7,165	6 6,263	2 87	100 6,873	5 5,832	5 85	100 7,144	5 6,223	5 87

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Because of rounding, detail may not add to totals.

**KEY:** \* = Amount less than .05 percent

<sup>2</sup> Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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								Page	e 1 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Total, all agencies	9,149,264	3,328,018	36	9,831,528	3,171,623	32	8,865,954	2,940,948	33
Departments:									
Department of Agriculture, total	99,318 703 64,259 16,595 65	57,801 221 35,593 11,782 5	58 31 55 71 8	113,118 696 70,324 16,937 65	66,333 232 39,361 11,295 5	59 33 56 67 8	116,691 749 73,216 17,033 65	68,999 244 41,111 12,093 5	59 33 56 71 8
Forest Service	15,500	9,760	63	22,900	15,000	66	22,900	15,000	66
Grain Inspection Packers & Stockyards Administration	2,196	440	20	2,196	440	20	2,728	546	20
Department of Commerce, total Bureau of the Census Nat'l Inst of Standards & Tech Nat'l Oceanic & Atmospheric Admin National Telecommunications &	48,428 3,396 16,090 25,671	33,700 2,481 11,624 16,324	70 73 72 64	47,795 6,478 16,345 20,307	26,985 4,732 12,345 5,243	56 73 76 26	44,773 3,281 16,847 21,543	22,630 1,688 12,666 5,174	51 51 75 24
Information Administration	3,271	3,271	100	4,665	4,665	100	3,102	3,102	100
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies, total	6,870,947 1,135,442 1,409,401 2,577,265 1,517,401	2,257,613 300,659 519,619 1,062,614 372,133	33 26 37 41 25	7,494,222 1,211,343 1,464,549 2,775,896 1,830,410	2,125,027 119,285 504,760 1,137,328 361,141	28 10 34 41 20	6,438,549 1,041,815 1,042,400 2,599,134 1,532,309	1,875,979 107,977 311,317 1,076,797 377,222	29 10 30 41 25
Ballistic Missile Defense Org  Defense Adv Rsch Projects Agcy  Defense Info Systems Agcy  Defense Logistics Agency	583,631 226,581 16,026 29,503	97,007 164,818 11,423 2,406	17 73 71 8	904,717 195,143 45,244 24,003	97,499 139,962 31,008 196	11 72 69 1	762,607 194,771 51,184 14,604	102,537 138,018 36,182 201	13 71 71 1
Defense Threat Reduction Agency <sup>1</sup>	9,803	0	0	17,101	0	0	20,175	0	0
Joint Staff	53,945 38,480 559,432	1 4,232 92,246	* 11 16	161,241 57,158 425,803	1 5,780 86,695	* 10 20	49,073 52,907 386,988	1 5,850 94,433	* 11 24
DirectorTest & Evaluation, Deputy Under	7,281	347	5	5,199	445	9	2,989	467	16
Secretary of Defense	224,157	2,241	1	206,825	2,068	1	219,902	2,199	1
Department of Defense, total advanced technology (at) Department of the Air Force (at) Department of the Army (at) Department of the Navy (at) Defense Agencies, total (at)	1,478,698 524,758 249,498 126,014 578,428	568,759 253,172 54,393 46,298 214,896	38 48 22 37 37	1,401,217 150,659 318,932 128,186 803,440	355,945 62,629 54,178 47,096 192,042	25 42 17 37 24	1,045,262 159,135 208,384 126,291 551,452	352,174 57,532 58,791 46,399 189,452	34 36 28 37 34
Ballistic Missile Defense Organization (at) Defense Advanced Research	133,941	14,424	11	292,320	13,366	5	145,963	10,913	7
Projects Agency (at)  Defense Logistics Agency (at)	191,744 27,297	143,808 200	75 1	161,895 23,960	121,421 195	75 1	161,514 14,554	121,136 200	75 1
Defense Threat Reduction Agency (at) 1 Joint Staff (at)	9,803 53,945	0 1	0	17,101 161,241	0 1	0	20,175 49,073	0 1	0
Special Operations Command (at) Washington Headquarters	15,997	1,759	11	23,868	2,640	11	22,093	2,501	11
Services (at)	145,701	54,704	38	123,055	54,419	44	138,080	54,701	40

Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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	Γ							Page	e 2 of 3
		1998				Prelim	ninary		
Agency and subdivision			Per-		1999			2000	
J. 1, 11 11 11 11 11 11 11 11 11 11 11 11	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of Defense, total major systems (ms)  Department of the Air Force (ms)  Department of the Army (ms)  Department of the Navy (ms)  Defense Agencies, total (ms)	5,392,249 610,684 1,159,903 2,451,251 938,973	1,688,854 47,487 465,226 1,016,316 157,237	31 8 40 41 17	6,093,005 1,060,684 1,145,617 2,647,710 1,026,970	1,769,082 56,656 450,582 1,090,232 169,099	29 5 39 41 16	5,393,287 882,680 834,016 2,472,843 980,857	1,523,805 50,445 252,526 1,030,398 187,770	28 6 30 42 19
Ballistic Missile Defense Organization (ms) Defense Advanced Research Projects Agency (ms) Defense Information Systems Agency (ms) Defense Logistics Agency (ms)	449,690 34,837 16,026 2,206	82,583 21,010 11,423 2,206	18 60 71 100	612,397 33,248 45,244 43	84,133 18,541 31,008	14 56 69 2	616,644 33,257 51,184 50	91,624 16,882 36,182	15 51 71 2
Special Operations Command (ms)  Washington Headquarters Services (ms)	22,483 413,731 7,281	2,473 37,542 347	11 9 5	33,290 302,748 5,199	3,140 32,276 445	9 11 9	30,814 248,908 2,989	3,349 39,732 467	11 16 16
Secretary of Defense (ms)  Department of Education	224,157 2,554	2,241 1,792	1 70	206,825 5,554	2,068 2,323	1 42	219,902 22,936	2,199 2,969	1 13
Department of Energy  Dept of Health & Human Svcs, total Administration on Aging Agcy for HIth Care Policy & Rsch National Institutes of Health Office of the Secretary, total	280,215 371,845 341 7,700 363,526 277	82,620 139,492 231 7,700 131,283 277	38 68 100 36 100	342,577 397,519 341 10,100 386,777 300	87,391 156,684 231 10,100 146,052 300	26 39 68 100 38 100	355,526 408,619 341 9,000 398,709 450	74,512 166,376 231 9,000 156,694 450	21 41 68 100 39 100
Office of Public HIth & Science Substance Abuse & Mental Health Services Administration <sup>2</sup>	277 1	277 1	100 100	300 1	300 1	100 100	450 119	450 1	100 1
Dept of Housing & Urban Development  Department of the Interior, total  Bureau of Reclamation  Geological Survey	10,697 24,569 1,000 23,569	8,000 13,514 300 13,214	75 55 30 56	19,800 25,731 1,000 24,731	14,000 14,261 300 13,961	71 55 30 56	19,170 28,075 1,500 26,575	14,000 15,184 300 14,884	73 54 20 56
Department of Justice, total	36,313 500 35,812 0 1	4,958 400 4,557 0 1	14 80 13 0 100	36,861 500 36,160 200 1	5,007 400 4,605 1 1	14 80 13 *	37,209 500 36,208 500 1	5,055 400 4,653 1	14 80 13 *
Department of Labor, total  Employment & Training Admin  Office of the Secretary Pension Benefit Guaranty Corp	334 108 30 196	334 108 30 196	100 100 100 100	353 114 30 209	353 114 30 209	100 100 100 100	361 117 30 214	361 117 30 214	100 100 100 100
Department of Transportation, total Coast Guard	86,251 9,504 61,130 9,148 156	62,792 4,900 50,776 3,078 80	73 52 83 34 51	98,445 8,737 32,388 43,610 150	44,622 5,040 32,388 3,265 80	45 58 100 7 53	118,642 10,247 26,891 73,008 150	39,244 5,210 26,891 3,523 80	33 51 100 5 53
Federal Transit Administration	1,903 3,433 977	1,903 1,736 319	100 51 33	1,785 9,631 2,144	1,785 1,646 418	100 17 19	1,975 4,475 1,896	1,975 1,216 349	100 27 18

## Table C-91. Federal obligations for total development to intramural performers for personnel costs, by agency: fiscal years 1998, 1999, and 2000

#### [In thousands of dollars and percentages]

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		1998				Prelin	ninary		
Agency and subdivision			Per-		1999			2000	
	Total	Personnel costs	cent of total	Total	Personnel costs	Per- cent of total	Total	Personnel costs	Per- cent of total
Department of the Treasury, total Bureau of Engraving & Printing Internal Revenue Service United States Customs Service United States Mint	4,807 123 1,849 2,834 1	4,583 99 1,649 2,834 1	95 80 89 100 100	4,819 132 1,802 2,834 51	4,541 54 1,602 2,834 51	94 41 89 100 100	4,985 110 1,860 2,940 75		94 25 89 100 100
Department of Veterans Affairs	8,028	4,575	57	9,328	5,410	58	9,000	5,400	60
Other agencies:									
Consumer Product Safety Commission Environmental Protection AgencyInternat'l Development Cooperation	0 8,059	0 8,059	0 100	90 7,973	90 7,973	100 100	96 7,545	96 7,545	100 100
Agency, total	3,520 3,520 425	3,238 3,238 351	92 92 83	5,525 5,525 636	4,144 4,144 403	75 75 63	6,060 6,060 705	4,545 4,545 390	75 75 55
National Aeronautics & Space Admin Tennessee Valley Authority	1,291,108 1,846	643,215 1,381	50 75	1,221,182 0	606,076 0	50 0	1,247,012 0	632,960 0	51 0

The Defense Threat Reduction Agency (DTRA) was established on October 1, 1998. DTRA was formed through a merger of elements of the Office of the Secretary of Defense staff, the Defense Technology Security Administration, the Defense Special Weapons Agency, and the On-Site Inspection Agency.

NOTES: Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

**KEY:** \* = Amount less than .05 percent

Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-92. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	27,041.0	30,635.8	34,065.9	35,766.8	37,959.4	41,330.1	45,860.3	52,090.3	53,214.2	56,556.6	61,476.4
Departments:											
Dept of Agriculture, total	630.5 NA .9 NA	687.6 1.6 1.3 NA	782.5 1.3 1.2 425.9	828.4 1.7 1.5 436.1	858.8 2.1 .6 469.4	893.5 2.2 1.7 479.3		953.0 2.6 1.7 500.5	994.0 2.8 1.4 526.5	1,049.7 2.7 1.6 540.4	1,129.8 2.8 1.5 579.7
Inspection Service	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	6.2	7.7
Cooperative State Research, Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc Economics & Statistics Svc Forest Service	NA NA 35.6 NA 105.7	NA NA NA 31.1 100.6	199.0 38.0 NA NA 101.8	219.8 37.0 NA NA 116.0	220.4 36.8 NA NA 111.1	239.5 40.9 NA NA 109.2	243.6 45.1 NA NA 113.8	256.5 46.0 NA NA 113.5	274.1 43.2 NA NA 120.7	294.8 47.2 NA NA 138.0	336.9 50.0 NA NA 136.4
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.0 NA NA	.0 NA NA	.0 .0 7.5	.0 3.8 7.0	.0 5.8 7.6	.0 7.9 8.2	.9 7.2 8.4	1.0 10.6 8.0	1.2 9.6 3.5	1.0 8.2 3.6	1.1 8.4 2.8
Cooperation & Development Office of Transportation	.0 .5	6.4 .8	6.9 .9	4.6 .9	4.1 .8	3.6 1.0	5.8 1.3	7.5 1.0	5.1 1.0	5.0 1.1	2.5 NA
Science & Ed Admin, total Agricultural Research Svc Cooperative State Rsch Svc	487.8 331.2 156.6	545.8 371.6 174.2	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	307.1 2.7 26.7 18.7	360.6 3.2 35.5 24.1	346.8 3.8 35.5 NA	286.5 3.7 12.1 NA	335.2 4.3 5.3 NA	336.3 4.4 5.1 NA	377.8 4.8 7.8 NA	380.1 4.6 7.8 NA	311.1 4.5 7.2 NA	389.4 5.6 2.7 NA	403.2 5.0 1.3 NA
Standards & Technology	64.8	77.1	84.4	87.6	94.0	103.3	106.5	109.2	102.1	111.4	121.5
National Oceanic & Atmospheric Administration National Telecommunications &	190.1	210.6	209.0	174.1	222.0	214.7	249.1	248.7	189.2	263.5	269.1
Information Administration Office of the Secretary Patent & Trademark Office	3.3 .3 .5	9.1 .6 .5	12.9 .1 1.1	8.0 .2 .7	9.6 - .0	8.6 .1 .0	9.0 .6 .0	8.5 1.2 .0	7.8 .3 .0	6.1 .1 .0	6.2 .1 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	11,733.1 4,428.0 2,536.2 3,926.4 814.2	13,706.1 5,323.6 2,852.9 4,507.9 981.4	15,993.0 6,756.6 3,123.7 4,916.9 1,160.0	18,482.9 8,209.1 3,414.4 5,394.7 1,420.0	21,373.5 9,640.9 3,848.5 6,023.5 1,817.3	22,999.4 10,849.7 4,017.4 6,859.8 1,217.8	12,263.7 4,230.0 8,304.9	32,491.1 14,133.1 4,278.5 9,939.8 4,068.2	33,611.8 14,101.0 5,009.7 9,422.1 4,995.8	34,573.0 14,774.5 4,899.6 9,081.9 5,690.3	36,869.1 15,390.5 5,241.3 9,559.5 6,501.3
Operational Test & Evaluation, Director Test & Evaluation, Deputy	NA	NA	NA	NA	NA	NA	NA	.0	4.4	7.2	31.6
Under Secretary of Defense	28.3	40.4	35.7	44.8	43.3	54.7	55.1	71.6	78.8	119.6	145.0
Department of Education	136.5	120.9	111.8	150.1	111.5	181.3	95.7	125.3	138.3	142.9	155.7
Department of Energy	4,956.8	5,660.2	6,125.9	5,785.4	5,641.9	5,656.4	5,803.0	5,381.7	5,432.7	5,743.7	6,039.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-92. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 2 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total	3,172.7	3,554.1	3,997.5	4,052.1	4,118.6	4,484.9	5,049.6	5,531.4	5,751.0	6,923.2	7,773.4
Health Administration	184.7	218.1	251.1	292.0	289.8	276.1	349.8	396.6	476.1	554.8	695.7
Prevention	72.4 40.6 19.5	72.6 61.0 29.4	83.0 57.6 35.4	88.4 59.4 29.1	80.4 75.6 30.2	46.3 86.9 33.1	47.6 96.2 33.5	52.7 89.1 28.1	66.2 85.6 36.1	88.7 91.3 31.4	117.8 96.0 32.5
Health Resources Admin Hith Resources & Svcs Admin Health Services Admin Human Development Services National Insts of Health	3.2 NA 23.1 57.1 2,713.4	2.8 NA 20.2 48.5 3,029.3	3.7 NA 16.9 85.5 3,392.2	NA 17.5 NA 33.0 3,475.0	NA 16.3 NA 22.3 3,562.9	NA 13.4 NA 15.4 3,981.1	NA 16.0 NA 21.4 4,446.3	NA 13.0 NA 52.0 4,867.2	NA 9.2 NA 51.1 4,985.2	NA 10.0 NA 50.9 6,060.2	NA 10.5 NA 73.3 6,699.0
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	14.7 26.5 17.4	27.0 24.0 21.4	37.2 19.5 15.4	29.0 13.4 15.4	16.9 14.4 9.6	11.5 10.4 10.7	15.8 9.6 13.3	21.6 6.1 5.0	23.5 8.2 9.8	20.0 4.7 11.1	26.0 7.8 14.8
Dept of Housing & Urban Dvlpmt	74.3	65.8	54.1	37.0	30.9	24.9	18.6	13.9	19.7	14.9	20.7
Dept of the Interior, total Bonneville Power Admin Bureau of Land Management Bureau of Mines Bureau of Reclamation	404.3 .0 1.3 121.4 11.0	431.5 .0 1.7 130.8 13.1	436.9 14.0 1.9 109.0 13.4	394.9 NA 5.3 105.2 10.7	412.7 NA 3.9 102.0 11.1	435.9 NA 3.8 111.4 10.1	417.0 NA 4.4 100.4 10.5	445.4 NA 3.4 131.0 12.0	394.7 NA 3.6 91.2 10.6	419.6 NA 3.7 87.6 4.4	485.3 NA 3.0 92.6 4.2
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining	144.2 NA 8.9 1.5	145.2 NA 8.2 1.9	168.2 NA 10.4 2.0	150.1 .0 11.2 .4	171.4 1.3 13.7 1.3	228.4 1.5 14.0 .6	230.8 1.5 15.0 .3	226.5 1.1 17.3 .6	211.2 1.0 18.5 2.0	238.6 1.2 19.4 .4	300.9 1.9 19.4 .4
Reclamation & Enforcement	5.0	7.8	5.8	1.4	1.5	.8	2.0	2.3	1.0	1.0	.7
Office of Water Rsch & Tech US Fish & Wildlife Service	23.8 87.3	30.0 93.0	21.8 90.5	20.3 90.4	8.3 98.3	2.6 62.8	NA 52.1	NA 51.2	NA 55.7	NA 63.3	NA 62.2
Department of Justice, total Bureau of Prisons Drug Enforcement Admin Fed Bureau of Investigation Immigration & Naturalization	45.9 3.3 2.7 2.5	45.3 2.1 4.4 1.8	26.1 2.5 1.2 1.5	36.6 1.7 2.7 1.1	27.6 1.7 2.5 1.9	26.5 1.6 2.0 2.5	32.7 1.5 1.6 8.9	32.1 3.0 2.5 6.9	39.0 6.9 2.2 6.9	48.1 6.0 2.5 12.7	36.0 3.8 2.7 6.5
Service	.3	.3	1.0	.3	.2	.6	.4	.4	.4	5.2	.4
Office of Justice Programs Office of Legal Policy	35.5 1.6	35.1 1.6	19.2 .7	30.4 .4	21.1 .2	19.6 .3	20.1 .2	19.2 .2	22.4 .2	21.6 .0	22.5 .0
Department of Labor, total	109.2 .9 5.1 93.0	137.7 .9 4.7 121.7	61.6 .3 3.0 52.1	29.4 .3 1.3 20.2	16.8 .7 1.3 6.0	14.1 .5 1.3 3.5	13.7 .6 - 4.5	10.9 .6 .0 3.4	20.3 6.5 1.0 4.4	31.8 7.0 .1 11.2	28.9 7.0 .1 9.2
Cooperative Programs	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
Labor-Management Services Administration Occupational Safety & Health	3.5	2.8	1.7	.7	.9	NA	NA	NA	NA	NA	NA
AdministrationOffice of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	5.1 1.6 NA	6.3 1.3 NA	3.0 1.0 .5	4.9 .9 1.1	5.3 1.5 1.1	5.1 1.9 .3	4.5 2.6 .2	3.6 2.1 .1	4.1 2.7 .3	4.2 6.1 .3	4.5 6.1 .3
Administration	NA	NA	NA	NA	NA	1.2	1.1	.9	1.0	2.6	1.3
Department of State, total Departmental Funds	3.2 3.2	2.2 2.2	1.8 1.8	1.5 .0	1.5 .0	1.6 .0	1.5 .0	1.5 .0	3.0 .0	4.2 .0	4.7

### Table C-92. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total	372.4	391.0	432.1	360.0	282.3	357.5	430.2	445.2	347.7	332.1	291.5
	20.5	17.9	25.9	20.0	19.6	19.5	19.0	16.7	17.8	14.9	18.1
	111.4	109.7	125.9	110.9	99.5	167.5	283.7	317.6	190.5	190.2	153.5
	48.9	53.4	59.1	42.5	32.5	51.1	47.5	46.1	76.3	60.1	76.5
	58.0	63.5	55.0	25.6	18.5	14.7	16.2	15.4	10.9	10.6	7.0
Federal Transit Admin	50.5	58.9	61.9	69.8	36.5	31.2	18.6	8.8	9.4	1.4	2.0
	NA	NA	17.4	18.9	13.5	11.1	10.2	14.1	7.2	2.6	.0
National Highway Traffic Safety Administration Office of the Secretary	53.6	60.3	60.8	60.2	51.1	53.2	28.0	19.1	28.9	45.2	28.5
	16.7	14.9	13.9	5.6	4.0	5.0	4.7	5.2	4.7	5.2	4.2
Research & Special Programs Administration	12.8	12.4	12.3	6.5	7.1	4.2	2.4	2.3	2.1	2.0	1.6
Dept of the Treasury, total Bureau of Alcohol, Tobacco, &	9.6	10.9	10.8	13.6	15.6	13.6	24.3	23.0	26.4	25.8	23.5
FirearmsBureau of Engraving &	2.5	1.6	.3	NA	NA	NA	NA 5.0	NA	NA 	NA	NA
Printing Internal Revenue Service US Customs Service	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0	1.7
	3.6	4.0	4.2	5.4	8.0	7.9	15.9	13.4	14.1	14.0	14.0
	1.4	3.0	3.5	3.2	3.4	1.9	2.3	4.9	7.1	9.3	6.9
United States Mint	.0	.0	.0	.0	.0	.0	.6	-	.1	.2	.3
United States Secret Service	NA		.1	.3	.4	.2	.6	.5	.5	.4	.6
Department of Veterans Affairs	123.1	138.6	144.3	140.7	164.7	193.6	222.7	185.1	198.8	201.9	186.4
Other agencies:											
ACTIONAdvisory Commission on	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Intergovernmental Relations	1.7	1.7	1.9	1.8	1.9	2.1	2.0	2.0	1.6	1.4	1.2
Appalachian Regional Comm	.9	.8	.4	.4	.2	.4	.2	.2	.1	.2	.8
Community Services Admin	19.5	25.5	26.2	NA							
Consumer Product Safety Comm	5.8	6.3	.9	.2	.5	1.2	2.2	2.0	2.1	1.2	1.3
Environmental Protection Agcy	388.9	384.7	344.3	336.2	312.5	266.1	274.8	306.9	325.9	340.0	343.2
Fed Communications Commission	1.9	3.1	1.6	1.2	1.3	.9	1.1	.9	1.0	1.2	1.1
Federal Emergency Management Agency, total Federal Trade Commission General Services Admin	12.0	11.2	11.6	8.8	3.2	10.9	4.6	.0	.0	.0	.0
	1.5	3.2	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4	.4
	.5	.2	.6	1.0	.5	2.4	.4	1.9	1.6	2.3	.5
International Development Cooperation Agency, total Agcy for Internat'l Dvlpmt Interstate Commerce Commission Library of Congress Nat'l Aero & Space Admin	80.3	114.3	166.1	188.6	225.2	207.2	233.0	255.5	263.2	229.1	279.1
	80.3	114.3	166.1	188.6	225.2	207.2	233.0	255.5	263.2	229.1	279.1
	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
	5.4	6.5	5.1	5.4	6.7	7.2	6.3	6.9	6.5	7.1	8.0
	3,395.2	3,605.7	3,705.5	3,252.9	2,646.2	3,730.6	3,217.1	3,730.6	3,564.3	4,230.4	5,506.1
Nat'l Archives & Records Administration National Science Foundation Nuclear Regulatory Commission Office of Personnel Management Office of Thrift Supervision	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7	.3
	804.6	848.2	905.0	1,015.1	994.7	1,151.0	1,250.0	1,468.1	1,459.9	1,550.7	1,613.4
	145.4	182.8	216.0	208.6	244.0	198.6	161.1	136.0	124.4	113.5	113.2
	6.0	6.8	8.1	.0	.0	.0	.0	.0	.0	.0	.0
	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4	4.1
Smithsonian Institution Tennessee Valley Authority United States Arms Control &	37.8 45.4	39.5 75.3	43.9 94.3	48.4 89.5	57.3 63.7	55.2 66.3	59.8 81.0	64.0 79.5	71.5 76.9	74.8 86.9	82.6 61.7
Disarmament Agency US Information Agency US Internat'l Trade Comm	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	4.6	3.4	2.8
	.1	.1	1.2	-	-	-	1.1	2.4	10.0	1.5	1.0
	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1	8.7

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-92a. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 1 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all agencies	64,151.1	63,676.4	65,719.0	68,385.8	68,328.3	68,694.4	68,007.6	70,892.7	72,295.6	75,412.6	75,122.7
Departments:											
Dept of Agriculture, total	1,196.7 2.7 2.7 603.4	1,269.4 2.8 3.7 622.9	1,382.8 3.4 4.3 686.5	1,453.4 2.9 4.7 732.6	1,486.9 3.7 4.6 735.3	1,504.3 NA 5.0 758.4	1,438.3 NA 4.5 739.9	1,464.4 NA 4.5 770.4	1,538.6 NA 4.2 782.1	1,657.0 NA 4.8 891.2	1,655.1 NA 5.0 918.9
Inspection Service	14.0	15.7	16.7	17.1	19.2	19.1	19.5	19.8	20.5	20.0	20.0
Cooperative State Research, Ed, & Extension Service Economic Research Service Food Safety Inspection Svc Foreign Agricultural Svc Forest Service	361.9 50.7 .0 .0 144.5	395.6 53.0 .0 .0 159.8	415.1 57.5 .0 .0 182.0	433.2 61.5 .0 .0 185.8	456.9 57.3 .0 1.1 195.7	463.9 52.0 .0 .9 197.8	434.9 50.1 - 1.3 180.4	435.8 42.4 - 1.4 181.8	474.2 55.0 .2 1.4 190.6	472.1 55.9 .2 1.4 202.0	448.6 47.8 .2 1.4 202.0
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.6 9.0 2.7	.7 8.9 3.2	1.8 9.7 3.5	1.8 7.3 3.9	1.8 5.3 3.6	1.5 NA 4.2	2.5 NA 3.7	2.8 NA 3.0	2.7 NA 3.3	2.7 NA 3.2	3.4 NA 3.2
Cooperation & Development Rural Business-Coop Svc	4.3 NA	3.1 NA	2.4 NA	2.6 NA	.0 2.4	NA 1.6	NA 1.4	NA 2.5	NA 4.4	NA 3.5	NA 4.5
Department of Commerce, total Bureau of the Census Economic Development Admin National Institute of	441.5 6.7 1.5	500.7 6.6 1.0	643.4 5.5 1.1	652.0 5.0 .7	810.3 5.4 .3	886.4 5.1 1.0	945.1 6.6 .6	1,037.6 5.1 .6	1,063.5 8.6 .6	1,093.2 16.3 .6	1,087.2 8.3 .6
Standards & Technology National Oceanic &	120.3	144.1	160.6	189.8	237.8	350.4	404.9	473.3	482.3	479.3	490.6
Atmospheric Administration	306.7	345.3	472.2	452.4	562.9	523.6	528.5	530.9	546.5	572.8	561.5
National Telecommunications & Information Administration Office of the Secretary	6.2	3.6	4.0	4.2	3.9	6.4	4.5 .0	27.8 .0	25.5 .0	24.2 .0	26.3 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	37,140.0 14,888.1 5,797.1 9,453.5 6,853.6	33,447.2 13,043.8 5,724.5 7,902.0 6,685.3	34,631.7 12,532.3 6,295.2 8,115.0 7,450.3	34,525.9 12,287.9 6,125.3 9,187.5 6,689.7	35,179.2 12,799.2 5,797.8 8,213.3 8,125.3	34,001.9 12,051.8 5,137.3 9,454.1 7,112.1	35,501.6 13,474.4 4,954.4 9,605.0 7,198.7	35,699.0 14,912.1 4,889.9 8,417.1 7,182.6	35,530.3 14,246.2 4,920.4 8,038.1 8,047.4	36,190.2 13,972.6 5,301.8 8,659.1 7,968.7	33,500.2 13,344.9 4,589.8 8,230.4 7,055.2
Operational Test & Evaluation, Director Test & Evaluation, Deputy Under Secretary of Defense	32.0 115.8	22.3 69.4	9.4 229.4	12.3 223.2	11.9 231.8	12.4 234.3	22.1 247.1	21.5 275.8	27.8 250.4	37.0 251.1	26.4 253.5
Department of Education	150.7	117.2	135.5	186.7	179.2	180.6	172.0	169.1	192.0	212.9	267.5
Department of Energy	6.365.3	6.827.1	7.232.7	7.668.3	6.896.5	7,016.3	6.656.1	6.485.3	6.652.9	7,224.9	7.657.0
2 oparation of Energy	0,000.0	0,027.1	1,202.1	7,000.0	0,000.0	7,010.0	0,000.1	0, 100.0	0,002.0	7,22 1.0	7,007.0

## Table C-92a. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 2 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Department of Health & Human Services, total Administration on Aging Administration for Children	8,363.8 NA	9,822.1 20.6	9,091.5 20.2	10,475.2 20.9	10,352.5 19.1	11,245.2 20.7	10,419.0 2.9	11,457.7 4.0	12,786.4 10.4	14,257.3 18.4	15,776.4 18.4
& Families	NA	110.2	35.1	19.3	11.3	12.0	11.9	12.7	15.8	14.6	21.6
& Research	5.3	11.9	113.5	87.6	111.0	133.0	80.0	110.0	77.0	101.0	90.0
Health Administration	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	95.6 95.0 14.4 11.9 76.7	113.4 143.5 21.7 11.0 NA	146.9 150.0 63.9 10.5 NA	162.5 174.2 69.5 11.0 NA	206.8 160.5 72.3 17.8 NA	317.4 147.9 72.9 14.4 NA	296.7 138.8 75.4 11.9 NA	306.0 165.9 66.3 13.8 NA	343.6 155.9 51.3 13.8 NA	382.6 163.2 50.0 13.8 NA	468.6 170.7 55.0 13.9 NA
National Insts of Health Office of the Assistant	7,181.1	7,890.4	8,491.4	9,893.3	9,725.7	10,511.5	9,779.8	10,687.0	12,035.6	13,421.2	14,841.2
Secretary for Health	22.3 5.0	18.2 8.8	21.7 5.0	15.8 5.2	.7 5.0	.6 3.5	NA 5.0	NA 22.9	NA 7.0	NA 16.4	NA 17.0
Sec, Planning & Eval Office of Public Health &	NA	NA	NA	NA	NA	NA	3.0	21.0	5.0	14.0	14.0
Science	NA	NA	NA	NA	NA	NA	2.0	1.9	2.0	2.4	3.0
Social Security Admin Substance Abuse & Mental	13.9	11.9	33.4	15.9	22.2	11.3	NA	NA	NA	NA	NA
Health Services Admin <sup>1</sup>	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0	80.0
Dept of Housing & Urban Dvlpmt	21.7	18.1	23.5	28.4	28.5	38.0	36.2	31.7	31.6	42.4	52.5
Dept of the Interior, total  Bureau of Land Management  Bureau of Mines  Bureau of Reclamation  Geological Survey	503.0 2.8 96.7 5.8 301.3	556.2 8.8 97.7 8.7 319.5	628.4 6.3 113.9 12.2 370.3	651.8 8.9 111.8 9.6 385.2	644.9 .0 107.9 7.4 375.5	558.8 .0 .0 8.0 359.3	547.2 .0 NA 6.5 498.6	572.6 .0 NA 6.8 517.2	566.9 .0 NA 8.8 499.9	593.7 .0 NA 8.1 526.2	575.5 .0 NA 9.9 503.9
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	2.0 NA 20.1 .2	2.7 NA 27.5 .6	4.1 NA 31.1 .9	6.1 .0 38.1 .4	19.5 110.3 24.2 .1	20.8 151.0 19.7	21.7 NA 20.2 .0	22.6 NA 26.0 .0	28.4 NA 29.7 .0	29.7 NA 29.7 .0	29.9 NA 31.8 .0
Reclamation & Enforcement US Fish & Wildlife Service	.8 73.3	1.0 89.7	.3 89.3	.4 91.3	.0 .0						
Department of Justice, total	38.2 3.2 2.4 8.2	40.4 5.7 2.8 10.8	42.9 5.9 1.5 10.9	46.2 6.1 1.1 11.3	42.0 5.4 1.7 7.0	49.0 5.7 .4 10.9	72.7 5.2 1.2 33.5	75.5 4.6 - 35.5	73.2 8.1 .0 35.8	75.5 7.8 .0 36.2	63.0 8.0 .0 36.2
ServiceOffice of Justice Programs	.4 24.0	.4 20.7	.4 24.1	.4 27.2	.4 27.6	.4 31.5	.2 32.6	.4 35.0	.0 29.3	.5 31.0	.5 18.3
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Occupational Safety & Health	45.2 7.3 .1 25.6	45.6 7.5 .0 23.7	70.8 7.6 .0 51.0	57.8 6.9 .0 39.2	60.7 7.1 .0 41.8	51.7 13.1 .0 23.1	50.1 13.3 .0 24.6	39.1 12.6 .0 18.2	25.2 12.4 .0 4.7	23.7 12.4 .0 3.7	27.3 12.4 .0 5.8
Administration	2.5	2.6	3.1	2.5	3.2	4.3	6.6	5.4	4.6	5.0	5.2
Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	7.1 .5	8.7 .5	5.7	5.4 1.3	5.2 .7	6.2 1.4	2.6	.2 .7	.2 .6	.2 .7	.2 .7
Administration	2.1	2.5	2.6	2.6	2.7	3.6		2.0	2.7	1.8	3.0
Department of State <sup>2</sup>	4.7	5.9	5.6	5.3	.4	.5	1.0	.6	.5	.6	.6

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-92a. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 3 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Dept of Transportation, total	287.3 21.4 185.5 44.0 7.0	361.0 14.9 216.0 86.1 14.3	411.1 22.8 250.7 81.2 21.5	455.3 32.2 260.1 87.5 22.8	536.9 26.1 258.9 178.5 19.6	661.4 21.1 270.8 260.6 22.8	593.0 23.4 265.8 236.5 20.0	548.4 23.3 236.0 218.0 18.1	537.3 20.1 229.5 210.4 23.0	535.7 21.6 231.0 185.8 28.7	788.9 21.6 237.7 424.2 30.7
Federal Transit Admin Maritime Administration National Highway Traffic	2.3 .9	2.1 1.5	1.5 1.7	16.5 1.7	18.5 1.7	33.4 2.3	22.4 .0	19.5 .0	10.2 .0	14.5 .0	14.1 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 6.9	19.2 4.7	24.5 5.0	28.3 4.4	26.9 2.5	41.4 4.0	15.0 2.8	23.0 2.0	33.3 3.7	40.3 4.5	47.0 5.3
Administration	2.4	2.2	2.3	1.7	4.1	4.9	7.0	8.4	7.2	9.2	8.2
Dept of the Treasury, total	25.2	30.4	24.5	16.6	20.7	61.5	60.2	59.8	65.2	71.4	86.0
Bureau of Engraving & Printing	2.1	3.5	2.0	3.2	3.4	1.8	1.7	1.7	2.8	2.4	2.4
Financial Crimes Enforcement Network Internal Revenue Service Off of Thrift Supervision	.0 16.3 .0	1.8 17.3 3.0	1.5 17.3 .8	1.5 6.5 .7	.0 11.3 .5	.0 49.7 .6	.0 51.2 .5	.0 50.8 .6	.0 52.0 .7	.0 58.8 .8	.0 73.7 .9
US Customs Service United States Mint United States Secret Service	6.3 .1 .5	3.8 .5 .4	2.3 .0 .6	4.1 - .6	4.6 .4 .5	8.6 .3 .6	6.3 .0 .5	6.3 - .4	9.2 .1 .5	9.0 .0 .5	8.4 .1 .6
Department of Veterans Affairs	219.0	221.6	207.6	250.8	246.0	258.3	240.6	243.2	248.1	310.1	320.1
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.2 .4 1.2 388.5 1.3	1.2 .7 1.3 400.1 1.4	1.5 1.9 1.2 411.9 1.6	2.1 .9 1.2 497.7 1.6	1.4 .9 .4 558.3 1.7	1.4 .9 .4 495.5 2.3	NA .9 .1 476.3 2.8	NA .9 .1 537.0 3.1	NA .7 - 524.0 3.0	NA .7 .1 594.0 4.2	NA .8 1.1 651.0 2.7
Federal Trade Commission	.5 .7	1.0 3.6	1.3 20.9	.9 7.6	.7 5.5	.6 1.3	.5 4.1	.7 1.6	1.1 .0	1.1 .8	1.4 .0
Cooperation Agency, total	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	212.0	209.3	194.1
Development <sup>3</sup>	334.0 8.4	344.0 8.6	205.9 10.0	321.7 10.7	372.6 12.5	256.8 7.7	251.0 11.0	206.4 2.5	212.0 1.6	209.3 2.0	194.1 1.8
Nat'l Aero & Space Admin	6,762.2 .4 1,563.0 111.5 4.1	7,675.0 .7 1,687.1 107.5 NA	8,386.6 .7 1,813.6 116.5 NA	8,885.4 .3 1,841.7 119.6 NA	8,576.8 .3 1,983.6 92.4 NA	9,116.2 .1 1,977.0 88.8 NA	8,094.0 .1 2,212.0 75.2 NA	9,715.0 .1 2,318.0 67.5 NA	9,741.0 .1 2,302.0 54.3 NA	9,749.0 .1 2,334.0 49.8 NA	9,562.0 .1 2,634.0 47.2 NA
Smithsonian Institution Social Security Admin Tennessee Valley Authority	95.4 NA 66.7	98.5 NA 72.3	95.4 NA 103.5	97.2 NA 109.6	127.4 NA 97.9	125.0 NA 93.1	125.0 11.5 6.1	126.0 13.6 8.9	115.5 17.4 2.7	118.0 53.7 .0	125.0 36.9 .0

### Table C-92a. Federal outlays for research and development and for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
United States Arms Control & Disarmament Agency <sup>2</sup> US Information Agency US Internat'l Trade Comm	0.2 .0 9.1	0.4 .2 9.9	2.1 .2 12.3	1.5 .2 12.2	1.3 .6 9.4	1.1 .3 12.2	0.7 .1 3.2	1.2 .2 5.7	1.2 .2 7.2	0.1 .1 6.9	.0 0.1 7.1

- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-93. Federal outlays for research and development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	25,838.2	29,154.2	32,459.1	34,390.7	36,659.4	39,691.0	44,171.4	50,609.1	51,611.7	54,739.4	59,450.4
Departments:											
Dept of Agriculture, total Agricultural Cooperative Svc Agricultural Marketing Svc Agricultural Research Svc Animal & Plant Health Inspection Service	608.7 NA .9 NA	659.8 1.6 1.3 NA	743.4 1.3 1.2 390.1	807.2 1.7 1.5 417.5	826.0 2.1 .6 438.7	864.3 2.2 1.7 454.3	889.0 2.9 1.3 466.2	918.0 2.6 1.7 468.1	922.9 2.8 1.4 463.2 4.9	971.2 2.7 1.6 482.1 5.6	1,037.5 2.8 1.5 528.0
inspection Service	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.0	7.4
Cooperative State Research, Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc Economics & Statistics Svc Forest Service	NA NA 35.6 NA 102.2	NA NA NA 31.1 97.0	199.0 38.0 NA NA 98.6	219.8 37.0 NA NA 113.2	219.6 36.8 NA NA 109.8	235.7 40.9 NA NA 108.8	236.7 45.1 NA NA 113.1	254.8 46.0 NA NA 112.5	267.1 43.2 NA NA 119.9	277.3 47.2 NA NA 135.8	298.3 50.0 NA NA 134.7
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.0 NA NA	.0 NA NA	.0 .0 7.5	.0 3.8 7.0	.0 5.8 7.6	.0 7.9 8.2	.9 7.2 8.4	1.0 10.6 8.0	1.2 9.6 3.5	1.0 8.2 3.6	1.1 8.4 2.8
Cooperation & Development Office of Transportation	.0 .5	6.4 .8	6.9 .9	4.6 .9	4.1 .8	3.6 1.0	5.8 1.3	7.5 1.0	5.1 1.0	5.0 1.1	2.5 NA
Science & Ed Admin, total Agricultural Research Svc Cooperative State Rsch Svc	469.5 312.9 156.6	521.7 347.5 174.2	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	305.2 2.7 26.7 18.2	355.9 3.2 35.5 23.5	345.5 3.8 35.5 NA	285.4 3.7 12.1 NA	334.5 4.3 5.3 NA	327.0 4.4 5.1 NA	4.8 7.8 NA	372.6 4.6 7.8 NA	307.0 4.5 7.2 NA	378.6 5.6 2.4 NA	394.0 5.0 1.1 NA
Standards & Technology	63.4	76.8	83.9	86.6	93.3	94.1	102.2	103.3	100.0	101.3	113.0
National Oceanic & Atmospheric Administration National Telecommunications &	190.1	206.7	208.1	174.1	222.0	214.7	249.1	247.2	187.1	263.0	268.6
Information Administration Office of the Secretary Patent & Trademark Office	3.3 .3 .5	9.1 .6 .5	12.9 .1 1.1	8.0 .2 .7	9.6 - .0	8.6 .1 .0	9.0 .6 .0	8.5 1.2 .0	7.8 .3 .0	6.1 .1 .0	6.2 .1 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	11,497.3 4,263.1 2,534.1 3,873.5 798.3	13,501.4 5,220.6 2,845.3 4,417.0 978.2	15,754.5 6,626.6 3,114.8 4,824.7 1,152.6	18,251.2 8,141.4 3,400.9 5,269.4 1,394.8	21,105.8 9,537.2 3,827.0 5,886.8 1,811.5	22,619.3 10,658.5 3,983.0 6,709.4 1,213.6	12,063.9 4,176.6 8,161.1	32,210.5 14,044.0 4,223.5 9,809.1 4,062.4	33,254.4 13,906.8 4,949.0 9,357.1 4,958.4	34,156.8 14,567.0 4,837.8 9,003.1 5,622.1	36,453.4 15,190.8 5,201.6 9,475.0 6,409.5
Operational Test & Evaluation, Director Test & Evaluation, Deputy	NA	NA	NA	NA	NA	NA	NA	.0	4.4	7.2	31.6
Under Secretary of Defense	28.3	40.4	35.7	44.8	43.3	54.7	55.1	71.6	78.8	119.6	145.0
Department of Education	136.5	120.9	111.8	150.1	111.5	181.3	95.7	124.5	122.6	131.8	153.4
Department of Energy	4,303.3	4,697.5	5,041.4	4,842.1	4,817.5	4,740.3	4,947.7	4,655.8	4,711.3	4,964.7	5,200.6

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-93. Federal outlays for research and development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 2 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total	3,099.3	3,477.2	3,954.9	4,015.3	4,092.0	4,450.3	5,007.0	5,498.7	5,719.5	6,892.5	7,717.4
Alcohol, Drug Abuse, & Mental Health Administration	184.4	217.9	250.9	291.7	288.8	272.0	348.4	396.1	475.5	554.8	695.7
Centers for Disease Control & Prevention Food & Drug Administration Health Care Financing Admin	72.4 40.0 19.5	72.6 60.3 29.4	83.0 57.1 35.4	88.4 58.4 29.1	80.4 73.5 30.2	46.3 76.9 33.1	47.6 81.2 33.5	52.7 79.1 28.1	66.2 83.7 36.1	88.7 89.6 31.4	117.8 94.0 32.5
Health Resources Admin	3.2 NA 23.1 57.1 2,641.0	2.8 NA 20.2 48.5 2,953.2	3.7 NA 16.9 85.5 3,350.2	NA 17.5 NA 33.0 3,439.6	NA 16.3 NA 22.3 3,539.5	NA 13.4 NA 15.4 3,960.6	NA 16.0 NA 21.4 4,420.1	NA 13.0 NA 52.0 4,845.0	NA 9.2 NA 51.1 4,956.2	NA 10.0 NA 50.9 6,031.2	NA 10.5 NA 73.3 6,645.0
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	14.7 26.5 17.4	27.0 24.0 21.4	37.2 19.5 15.4	29.0 13.4 15.4	16.9 14.4 9.6	11.5 10.4 10.7	15.8 9.6 13.3	21.6 6.1 5.0	23.5 8.2 9.8	20.0 4.7 11.1	26.0 7.8 14.8
Dept of Housing & Urban Dvlpmt	74.3	65.8	54.1	37.0	30.9	24.9	18.6	13.9	19.7	14.9	20.7
Dept of the Interior, total	395.3 .0 1.3 117.1 11.0	422.7 .0 1.7 128.4 13.1	432.8 13.7 1.9 106.9 13.4	393.6 NA 5.3 105.0 10.7	410.3 NA 3.9 101.9 11.1	430.7 NA 3.8 111.3 10.1	412.8 NA 4.4 100.4 10.5	439.3 NA 3.4 131.0 12.0	390.0 NA 3.6 91.2 10.6	414.6 NA 3.7 87.6 4.4	478.4 NA 3.0 90.6 4.2
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining	144.2 NA 8.9 1.5	145.2 NA 8.2 1.9	168.2 NA 10.4 2.0	150.1 .0 11.2 .4	169.9 1.3 13.7 1.3	227.2 1.5 14.0 .6	229.9 1.5 15.0 .3	225.6 1.1 17.3 .6	210.4 1.0 18.5 2.0	237.9 1.2 19.4 .4	299.5 1.9 19.4 .4
Reclamation & Enforcement	5.0	7.5	5.8	1.4	1.5	.8	2.0	2.3	1.0	1.0	.7
Office of Water Rsch & Tech US Fish & Wildlife Service	23.1 83.2	29.3 87.7	21.1 89.5	19.4 90.1	8.3 97.5	2.6 58.8	NA 48.8	NA 46.0	NA 51.7	NA 59.0	NA 58.8
Department of Justice, total Bureau of Prisons Drug Enforcement Admin Fed Bureau of Investigation Immigration & Naturalization	45.9 3.3 2.7 2.5	45.3 2.1 4.4 1.8	26.1 2.5 1.2 1.5	36.6 1.7 2.7 1.1	27.6 1.7 2.5 1.9	26.5 1.6 2.0 2.5	32.7 1.5 1.6 8.9	32.1 3.0 2.5 6.9	38.7 6.9 2.2 6.6	48.1 6.0 2.5 12.7	36.0 3.8 2.7 6.5
Service	.3	.3	1.0	.3	.2	.6	.4	.4	.4	5.2	.4
Office of Justice Programs Office of Legal Policy	35.5 1.6	35.1 1.6	19.2 .7	30.4 .4	21.1 .2	19.6 .3	20.1 .2	19.2 .2	22.4 .2	21.6 .0	22.5 .0
Department of Labor, total	109.2 .9 5.1 93.0	137.7 .9 4.7 121.7	61.6 .3 3.0 52.1	29.4 .3 1.3 20.2	16.8 .7 1.3 6.0	14.1 .5 1.3 3.5	13.7 .6 - 4.5	10.9 .6 .0 3.4	20.3 6.5 1.0 4.4	31.8 7.0 .1 11.2	28.9 7.0 .1 9.2
Cooperative Programs	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
Labor-Management Services Administration Occupational Safety & Health	3.5	2.8	1.7	.7	.9	NA	NA	NA	NA	NA	NA
Administration Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	5.1 1.6 NA	6.3 1.3 NA	3.0 1.0 .5	4.9 .9 1.1	5.3 1.5 1.1	5.1 1.9 .3	4.5 2.6 .2	3.6 2.1 .1	4.1 2.7 .3	4.2 6.1 .3	4.5 6.1 .3
Administration	NA	NA	NA	NA	NA	1.2	1.1	.9	1.0	2.6	1.3
Department of State, total  Departmental Funds	3.2 3.2	2.2 2.2	1.8 1.8	1.5 .0	1.5 .0	1.6 .0	1.5 .0	1.5 .0	3.0 .0	4.2 .0	4.7

### Table C-93. Federal outlays for research and development, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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											igc 5 61 5
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	356.2 20.5 101.9 48.7 51.7	374.7 17.9 104.2 53.1 53.2	415.9 25.9 119.8 56.3 48.2	347.0 20.0 106.6 42.5 17.4	272.4 19.6 90.3 32.5 18.3	344.6 19.5 155.1 51.1 14.7	416.1 19.0 270.1 47.5 16.2	429.8 16.7 303.3 45.5 15.4	336.6 17.8 180.1 76.0 10.9	321.0 14.6 179.6 60.1 10.3	278.6 18.1 141.0 76.5 6.7
Federal Transit Admin	50.5 NA	58.9 NA	61.9 17.4	69.8 18.9	36.5 13.5	31.2 11.1	18.6 10.2	8.8 14.1	9.4 7.2	1.4 2.6	2.0 .0
National Highway Traffic Safety Administration Office of the Secretary	53.4 16.7	60.1 14.9	60.3 13.9	59.7 5.6	50.6 4.0	52.7 5.0	27.5 4.7	18.6 5.2	28.4 4.7	45.2 5.2	28.5 4.2
Research & Special Programs Administration	12.8	12.4	12.3	6.5	7.1	4.2	2.4	2.3	2.1	2.0	1.6
Dept of the Treasury, total Bureau of Alcohol, Tobacco, &	9.5	10.9	10.8	13.6	15.5	13.5	24.2	22.9	26.3	25.7	23.4
FirearmsBureau of Engraving &	2.5	1.6	.3	NA	NA	NA	NA 5.0	NA	NA	NA	NA 
Printing Internal Revenue Service US Customs Service	2.1 3.6 1.3	2.3 4.0 3.0	2.7 4.2 3.5	4.8 5.4 3.1	3.9 8.0 3.3	3.6 7.9 1.8	5.0 15.9 2.2	4.2 13.4 4.8	4.5 14.1 7.0	2.0 14.0 9.2	1.7 14.0 6.8
United States Mint United States Secret Service	.0 NA	.0	.0 .1	.0 .3	.0 .4	.0 .2	.6 .6	.4	.1 .5	.2 .4	.3 .6
Department of Veterans Affairs	120.3	134.4	137.8	137.7	154.1	189.0	215.1	181.2	195.1	197.3	184.9
Other agencies:											
ACTIONAdvisory Commission on	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Intergovernmental Relations Appalachian Regional Comm Community Services Admin Consumer Product Safety Comm	1.7 .9 19.5 3.1	1.7 .8 25.5 3.6	1.9 .4 26.2 .9	1.8 .4 NA .2	1.9 .2 NA .5	2.1 .4 NA 1.2	2.0 .2 NA 2.2	2.0 .2 NA 2.0	1.6 .1 NA 2.1	1.4 .2 NA 1.2	1.2 .8 NA 1.3
Environmental Protection Agcy Fed Communications Commission Federal Emergency Management	386.5 1.9	384.7 3.1	344.3 1.6	336.2 1.2	312.5 1.3	266.1 .9	274.8 1.1	306.9 .9	325.9 1.0	340.0 1.2	343.2 1.1
Agency, total  Federal Trade Commission  General Services Admin	12.0 1.5 .5	11.2 3.2 .2	11.6 1.1 .6	8.8 1.2 1.0	3.2 1.4 .5	10.9 1.6 2.4	4.6 1.7 .4	.0 1.8 1.2	.0 .5 1.6	.0 .4 2.3	.0 .4 .5
International Development Cooperation Agency, total Agcy for Internat'l Dvlpmt Interstate Commerce Commission Library of Congress Nat'l Aero & Space Admin	75.8 75.8 .2 5.4 3,262.5	107.8 107.8 .1 6.5 3,465.4	159.9 159.9 .0 5.1 3,558.6	178.3 178.3 .0 5.4 3,140.7	212.8 212.8 .0 6.7 2,538.0	195.8 195.8 .0 7.2 3,538.7	220.3 220.3 .0 6.3 2,970.3	241.5 241.5 .0 6.9 3,431.5	248.7 248.7 .0 6.5 3,250.4	216.6 216.6 .0 7.1 3,831.7	279.1 279.1 .0 8.0 4,974.8
Nat'l Archives & Records Administration National Science Foundation Nuclear Regulatory Commission Office of Personnel Management Office of Thrift Supervision	NA 775.2 137.5 6.0 .9	NA 830.6 175.4 6.8 1.2	NA 892.3 208.7 8.1 1.0	NA 1,013.6 208.6 .0 2.7	NA 991.8 244.0 .0 3.0	NA 1,108.0 198.6 .0 2.6	.5 1,186.0 161.1 .0 2.8	1.0 1,410.7 136.0 .0 3.3	1.1 1,410.0 124.4 .0 3.4	.7 1,494.0 113.5 .0 3.4	.3 1,556.7 113.2 .0 4.1
Smithsonian Institution Tennessee Valley Authority United States Arms Control &	37.2 37.2	39.1 74.7	43.5 93.9	48.0 89.3	56.2 63.3	54.6 66.0	58.9 80.7	62.5 78.9	69.9 76.5	73.2 86.4	79.8 61.6
Disarmament Agency US Information Agency US Internat'l Trade Comm	3.5 .1 3.4	3.8 .1 2.1	2.4 1.2 3.4	1.9 - 3.8	1.0 - 4.7	1.3 - 5.0	1.1 1.1 5.8	.9 2.4 6.9	3.6 10.0 7.2	3.4 1.5 8.1	2.8 1.0 8.7
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NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-93a. Federal outlays for research and development, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 1 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all agencies	62,135.3	61,130.4	62,934.5	65,241.3	66,150.8	66,662.0	66,142.0	68,897.9	70,434.5	73,407.9	73,000.0
Departments:											
Dept of Agriculture, total	1,072.5 2.7 2.7 548.1	1,189.4 2.8 3.7 573.5	1,246.0 3.4 4.3 617.1	1,303.9 2.9 4.7 643.4	1,353.6 3.7 4.6 660.0	1,375.8 NA 5.0 679.3	1,335.7 NA 4.5 672.4	1,342.2 NA 4.5 699.5	1,379.5 NA 4.2 687.1	1,496.6 NA 4.8 775.4	1,514.1 NA 5.0 808.1
Inspection Service	8.0	15.7	16.7	17.1	19.2	19.1	18.0	19.8	20.5	20.0	20.0
Cooperative State Research, Ed, & Extension Service Economic Research Service Food Safety Inspection Svc Foreign Agricultural Svc Forest Service	303.9 50.7 .0 .0 139.6	380.1 53.0 .0 .0 144.7	354.9 57.5 .0 .0 174.8	379.4 61.5 .0 .0 179.3	404.1 57.3 .0 .7 190.8	418.8 52.0 .0 .9 193.5	403.8 50.1 - 1.3 177.9	386.5 42.4 - 1.4 179.8	412.7 55.0 .2 1.4 188.0	432.5 55.9 .2 1.4 197.0	423.4 47.8 .2 1.4 197.0
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.6 9.0 2.7	.7 8.9 3.2	1.8 9.7 3.5	1.8 7.3 3.9	1.8 5.3 3.6	1.5 NA 4.2	2.5 NA 3.7	2.8 NA 3.0	2.7 NA 3.3	2.7 NA 3.2	3.4 NA 3.2
Cooperation & Development Rural Business-Coop Svc	4.3 NA	3.1 NA	2.4 NA	2.6 NA	.0 2.4	NA 1.6	NA 1.4	NA 2.5	NA 4.4	NA 3.5	NA 4.5
Department of Commerce, total Bureau of the Census Economic Development Admin National Institute of	426.8 6.7 1.5	485.1 6.6 1.0	622.1 5.5 1.1	629.6 5.0 .7	797.4 5.4 .3	863.0 5.1 1.0	918.1 6.6 .6	967.1 5.1 .6	994.1 8.6 .6	1,052.1 16.3 .6	1,015.7 8.3 .6
Standards & Technology National Oceanic &	112.3	135.9	149.1	180.1	225.2	327.4	378.0	424.4	439.8	451.6	448.9
Atmospheric Administration	300.1	338.0	462.4	439.5	562.6	523.1	528.5	509.3	519.6	559.4	531.7
National Telecommunications & Information Administration Office of the Secretary	6.2	3.6	4.0	4.2	3.9	6.4	4.5 .0	27.8 .0	25.5 .0	24.2 .0	26.3 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	36,703.2 14,687.9 5,750.2 9,352.3 6,765.0	33,013.5 12,825.6 5,659.5 7,815.0 6,621.8	34,220.8 12,346.1 6,273.2 8,004.0 7,358.7	34,152.7 12,056.9 6,118.3 9,114.0 6,628.0	34,918.2 12,645.5 5,794.0 8,150.5 8,084.7	33,920.9 12,024.9 5,133.0 9,416.6 7,099.7	35,387.0 13,420.3 4,948.7 9,578.5 7,170.3	35,646.6 14,886.7 4,885.2 8,400.2 7,177.3	35,490.6 14,242.5 4,916.3 8,015.2 8,038.4	36,128.4 13,968.5 5,297.7 8,631.5 7,942.6	33,461.7 13,342.5 4,588.0 8,199.4 7,051.9
Operational Test & Evaluation, Director Test & Evaluation, Deputy Under Secretary of Defense	32.0 115.8	22.3 69.4	9.4 229.4	12.3 223.2	11.9 231.8	12.4 234.3	22.1 247.1	21.5 275.8	27.8 250.4	37.0 251.1	26.4 253.5
Department of Education	147.9	114.5	133.0	173.8	177.2	179.6	172.0	169.1	192.0	212.9	267.5
Department of Energy	5,508.4	5,727.2	6,034.7	6,185.1	5,974.7	6,152.2	5,846.2	5,678.6	5,876.7	6,390.0	6,716.9
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## Table C-93a. Federal outlays for research and development, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 2 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Department of Health & Human Services, total	8,308.7 NA	9,627.3 20.6	8,994.8 20.2	10,325.9 20.9	10,218.2 19.1	10,978.2 20.7	10,278.5 2.9	11,337.2 4.0	12,629.5 10.4	14,007.6 18.4	15,500.7 18.4
& Families	NA	110.2	35.1	19.3	11.3	12.0	11.9	12.7	15.8	14.6	21.6
& ResearchAlcohol, Drug Abuse, & Mental	5.3	11.9	113.5	87.6	111.0	133.0	80.0	110.0	77.0	101.0	90.0
Health Administration	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	95.6 94.0 14.4 11.9 76.7	113.4 125.0 21.7 11.0 NA	146.9 135.7 63.9 10.1 NA	162.5 154.5 69.5 9.6 NA	206.8 138.6 72.3 16.4 NA	317.4 131.3 72.9 12.8 NA	296.7 133.3 75.4 11.2 NA	306.0 157.3 66.3 13.1 NA	343.6 142.9 51.3 12.9 NA	382.6 141.2 50.0 13.0 NA	468.6 151.7 55.0 13.1 NA
National Insts of Health Office of the Assistant	7,127.0	7,714.0	8,409.2	9,765.1	9,614.8	10,262.8	9,645.6	10,575.9	11,892.5	13,194.4	14,585.3
Secretary for Health	22.3 5.0	18.2 8.8	21.7 5.0	15.8 5.2	.7 5.0	.6 3.5	NA 5.0	NA 22.9	NA 7.0	NA 16.4	NA 17.0
Sec, Planning & Eval Office of Public Health &	NA	NA	NA	NA	NA	NA	3.0	21.0	5.0	14.0	14.0
Science	NA	NA	NA	NA	NA	NA	2.0	1.9	2.0	2.4	3.0
Social Security Admin Substance Abuse & Mental	13.9	11.9	33.4	15.9	22.2	11.3	NA	NA	NA	NA	NA
Health Services Admin <sup>1</sup>	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0	80.0
Dept of Housing & Urban Dvlpmt	21.7	18.1	23.5	28.4	28.5	38.0	36.2	31.7	31.6	42.4	52.5
Dept of the Interior, total Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	492.5 2.8 93.6 5.8 300.0	535.6 8.8 96.3 8.7 316.6	610.6 6.3 113.9 12.2 365.9	631.0 8.9 111.8 9.6 381.2	637.4 .0 107.9 7.4 369.1	552.3 .0 .0 8.0 354.1	545.1 .0 NA 6.5 497.6	566.1 .0 NA 6.8 512.5	565.3 .0 NA 8.8 499.9	592.4 .0 NA 8.1 526.2	574.3 .0 NA 9.9 503.9
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	1.8 NA 20.1 .2	2.5 NA 27.5 .6	3.4 NA 31.1 .9	5.1 .0 38.1 .4	18.3 110.3 24.2 .1	19.8 150.7 19.7	20.7 NA 20.2 .0	20.8 NA 26.0 .0	26.8 NA 29.7 .0	28.4 NA 29.7 .0	28.7 NA 31.8 .0
Reclamation & Enforcement US Fish & Wildlife Service	.8 67.3	1.0 73.6	.3 76.6	.4 75.5	.0 .0						
Department of Justice, total Bureau of Prisons Drug Enforcement Admin Fed Bureau of Investigation Immigration & Naturalization	38.2 3.2 2.4 8.2	40.4 5.7 2.8 10.8	42.9 5.9 1.5 10.9	46.2 6.1 1.1 11.3	42.0 5.4 1.7 7.0	49.0 5.7 .4 10.9	72.7 5.2 1.2 33.5	75.5 4.6 - 35.5	73.2 8.1 .0 35.8	75.5 7.8 .0 36.2	63.0 8.0 .0 36.2
ServiceOffice of Justice Programs	.4 24.0	.4 20.7	.4 24.1	.4 27.2	.4 27.6	.4 31.5	.2 32.6	.4 35.0	.0 29.3	.5 31.0	.5 18.3
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Occupational Safety & Health	45.2 7.3 .1 25.6	45.6 7.5 .0 23.7	70.8 7.6 .0 51.0	57.8 6.9 .0 39.2	60.7 7.1 .0 41.8	51.7 13.1 .0 23.1	50.1 13.3 .0 24.6	39.1 12.6 .0 18.2	25.2 12.4 .0 4.7	23.7 12.4 .0 3.7	27.3 12.4 .0 5.8
Administration	2.5	2.6	3.1	2.5	3.2	4.3	6.6	5.4	4.6	5.0	5.2
Office of the SecretaryPension Benefit Guaranty Corp Pension & Welfare Benefits	7.1 .5	8.7 .5	5.7	5.4 1.3	5.2 .7	6.2 1.4	2.6	.2 .7	.6	.2 .7	.2 .7
Administration	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.7	1.8	3.0
Department of State <sup>2</sup>	4.7	5.9	5.6	5.3	.4	.5	1.0	.6	.5	.6	.6

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-93a. Federal outlays for research and development, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 3 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Dept of Transportation, total	270.6 21.0 169.2 44.0 7.0	342.6 14.5 199.6 86.1 12.8	394.0 22.4 234.9 81.2 20.6	425.2 31.7 234.5 87.1 21.6	519.9 25.5 247.2 174.7 18.6	634.7 20.6 256.8 249.6 21.5	578.8 22.8 259.8 230.4 18.5	527.6 22.9 218.0 215.6 18.1	516.0 19.9 210.5 209.3 22.0	518.2 21.3 215.0 185.3 28.0	773.3 21.4 223.5 423.4 30.3
Federal Transit Admin Maritime Administration National Highway Traffic	2.3 .9	2.1 1.5	1.5 1.7	14.3 1.7	18.5 1.7	33.4 2.3	22.4 .0	19.5 .0	10.2 .0	14.5 .0	14.1 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 6.9	19.2 4.7	24.5 5.0	28.3 4.4	26.9 2.5	41.4 4.0	15.0 2.8	23.0 2.0	33.3 3.7	40.3 4.5	47.0 5.3
Administration	2.4	2.2	2.3	1.7	4.1	4.9	7.0	8.4	7.2	9.2	8.2
Dept of the Treasury, total	25.1	30.3	24.4	16.5	18.9	61.4	60.0	59.7	65.1	71.3	85.9
Bureau of Engraving & Printing	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	2.8	2.4	2.4
Financial Crimes Enforcement Network Internal Revenue Service Off of Thrift Supervision	.0 16.3 .0	1.8 17.3 3.0	1.5 17.3 .8	1.5 6.5 .7	.0 11.3 .5	.0 49.7 .6	.0 51.2 .5	.0 50.8 .6	.0 52.0 .7	.0 58.8 .8	.0 73.7 .9
US Customs Service United States Mint United States Secret Service	6.2 .1 .5	3.7 .5 .4	2.2 .0 .5	4.0 - .6	4.5 .4 .5	8.5 .3 .5	6.2 .0 .5	6.1 - .4	9.0 .1 .5	8.8 .0 .5	8.3 .1 .6
Department of Veterans Affairs	206.6	213.4	202.1	246.0	240.8	251.1	232.1	234.9	246.9	304.0	314.9
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.2 .4 1.2 388.5 1.3	1.2 .7 1.3 400.1 1.4	1.5 1.9 1.2 411.9 1.6	2.1 .9 1.2 495.2 1.6	1.4 .9 .4 553.5 1.7	1.4 .9 .4 492.5 2.3	NA .9 .1 476.3 2.8	NA .9 .1 515.0 3.1	NA .7 - 503.0 3.0	NA .7 .1 505.0 4.2	NA .8 1.1 537.0 2.7
Federal Trade Commission	.5 .7	1.0 .0	1.3 .0	.9 .0	.7 .0	.6 .0	.5 .0	.7 .0	1.1 .0	1.1 .0	1.4 .0
Cooperation Agency, total	334.0	344.0	205.9	321.7	372.6	256.8	251.0	206.4	212.0	209.3	194.1
Development <sup>3</sup>	334.0 8.4	344.0 8.6	205.9 10.0	321.7 10.7	372.6 12.5	256.8 7.7	251.0 11.0	206.4 2.5	212.0 1.6	209.3 2.0	194.1 1.8
Nat'l Aero & Space Admin Nat'l Archives & Records Admin National Science Foundation Nuclear Regulatory Commission Office of Thrift Supervision	6,324.3 .4 1,524.9 111.5 4.1	7,071.2 .7 1,630.6 107.5 NA	7,616.5 .7 1,732.7 116.5 NA	8,087.0 .3 1,754.2 119.6 NA	8,023.3 .3 1,873.0 92.4 NA	8,600.7 .1 1,876.0 88.8 NA	7,614.0 .1 2,054.0 75.2 NA	9,273.0 .1 2,000.0 67.5 NA	9,421.0 .1 2,010.0 54.3 NA	9,419.0 .1 2,125.0 49.8 NA	9,242.0 .1 2,437.0 47.2 NA
Smithsonian Institution Social Security Admin Tennessee Valley Authority	90.8 NA 61.8	94.0 NA 68.6	94.2 NA 98.8	96.0 NA 108.6	121.2 NA 97.9	119.0 NA 93.1	121.0 11.5 6.1	123.0 13.6 8.9	113.0 17.4 2.7	115.0 53.7 .0	122.0 36.9 .0

### Table C-93a. Federal outlays for research and development, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
United States Arms Control & Disarmament Agency <sup>2</sup> US Information Agency US Internat'l Trade Comm	0.2 .0 9.1	0.4 .2 9.9	2.1 .2 12.3	1.5 .2 12.2	1.3 .6 9.4	1.1 .3 12.2	0.7 .1 3.2	1.2 .2 5.7	1.2 .2 7.2	0.1 .1 6.9	.0 0.1 7.1

- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

**NOTES:** Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

### Table C-94. Federal outlays for R&D plant, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 2
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	1,202.8	1,481.7	1,606.7	1,376.1	1,299.9	1,639.2	1,688.9	1,481.2	1,602.4	1,817.2	2,026.1
Departments:											
Dept of Agriculture, total Agricultural Research Svc Animal & Plant Health	21.7 NA	27.7 NA	39.0 35.8	21.3 18.5	32.8 30.7	29.2 25.0	34.3 26.7	35.0 32.4	71.1 63.3	78.5 58.3	92.3 51.7
Inspection Service	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.3
Ed, & Extension Service Forest Service	NA 3.5	NA 3.6	.0 3.2	.0 2.7	.8 1.3	3.8 .4	6.9 .7	1.6 1.0	7.0 .8	17.5 2.2	38.6 1.7
Science & Ed Admin, total Agricultural Research Svc	18.2 18.2	24.1 24.1	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Department of Commerce, total Economic Development Admin Maritime Administration National Institute of	1.9 .0 .5	4.8 .0 .6	1.3 .0 NA	1.0 .0 NA	.7 .0 NA	9.2 .0 NA	4.3 .0 NA	7.4 .0 NA	4.2 .0 NA	10.9 .3 NA	9.1 .2 NA
Standards & Technology National Oceanic &	1.4	.3	.5	1.0	.7	9.2	4.3	6.0	2.1	10.1	8.5
Atmospheric Administration	.0	3.9	.8	.0	.0	.0	.0	1.5	2.1	.5	.5
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	235.8 164.9 2.1 52.9 15.9	204.7 103.0 7.6 90.9 3.2	238.5 130.0 8.9 92.2 7.4	231.7 67.7 13.5 125.3 25.2	267.7 103.7 21.5 136.7 5.8	380.1 191.2 34.4 150.3 4.2	401.7 199.8 53.4 143.8 4.7	280.6 89.1 55.0 130.7 5.8	357.3 194.3 60.7 65.0 37.4	416.2 207.5 61.8 78.8 68.1	415.6 199.7 39.7 84.5 91.8
Department of Education	.0	.0	.0	.0	.0	.0	.0	.8	15.8	11.1	2.3
Department of Energy	653.5	962.8	1,084.5	943.3	824.5	916.1	855.3	725.8	721.3	779.0	838.3
Department of Health & Human Services, totalAlcohol, Drug Abuse, & Mental	73.4	76.9	42.6	36.8	26.5	34.6	42.6	32.7	31.5	30.7	56.0
Health Administration Food & Drug Administration National Insts of Health	.4 .6 72.5	.1 .7 76.0	.1 .5 42.0	.4 1.0 35.4	1.0 2.1 23.4	4.1 10.0 20.5	1.4 15.0 26.2	.5 10.0 22.2	.6 1.9 29.0	.0 1.7 29.0	.0 2.0 54.0
Dept of the Interior, total  Bonneville Power Admin  Bureau of Mines  Geological Survey  Office of Surface Mining	9.0 .0 4.3 .0	8.7 .0 2.4 .0	4.1 .3 2.1 .0	1.3 NA .2 .0	2.4 NA .1 1.5	5.2 NA .1 1.1	4.2 NA .0 .9	6.1 NA .0 .9	4.8 NA .0 .8	5.1 NA .0 .8	6.8 NA 2.1 1.4
Reclamation & Enforcement	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
Office of Water Rsch & Tech US Fish & Wildlife Service	.7 4.0	.7 5.3	.8 1.0	.9 .3	.0 .8	.0 4.0	NA 3.3	NA 5.2	NA 4.0	NA 4.3	NA 3.4
Department of Justice, totalFed Bureau of Investigation	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.3 .3	.0 .0	.0 .0
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin National Highway Traffic Safety Administration	16.2 .0 9.5 .2 6.3	16.3 .0 5.5 .3 10.3	16.2 .0 6.1 2.8 6.8	13.0 .0 4.3 .0 8.2	9.9 .0 9.2 .0 .2	12.9 .0 12.4 .0 .0	14.1 .0 13.6 .0 .0	15.5 .0 14.3 .7 .0	11.2 .0 10.4 .3 .0	11.1 .3 10.5 .0 .2	12.9 .0 12.6 .0 .3
Dept of the Treasury, total US Customs Service United States Secret Service	- - NA	- - 0.	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .1	.1 .1 -	.1 .1	.1 .1
Department of Veterans Affairs	2.8	4.2	6.5	2.9	10.6	4.6	7.6	3.9	3.7	4.6	1.5

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

#### Table C-94. Federal outlays for R&D plant, by agency: fiscal years 1979-1989

[Dollars in millions]

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											.go _ o
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other agencies:											
Consumer Product Safety Comm Environmental Protection Agcy General Services Admin nternational Development	2.7 2.4 .0	2.7 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .7	.0 .0 .0	.0 .0 .0	.0 .0 .0
Cooperation Agency, total	4.5 4.5	6.6 6.6	6.2 6.2	10.3 10.3	12.3 12.3	11.4 11.4	12.8 12.8	14.0 14.0	14.4 14.4	12.6 12.6	.0 .0
Nat'l Aero & Space Admin National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Tennessee Valley Authority Jnited States Arms Control & Disarmament Agency	132.7 29.4 8.0 .6 8.2	140.3 17.6 7.4 .4 .6	146.9 12.7 7.3 .4 .4	112.2 1.5 .0 .4 .2	108.1 2.9 .0 1.1 .4	191.9 43.0 .0 .6 .2	246.8 64.0 .0 .9 .3	299.1 57.3 .0 1.5 .6	313.9 49.9 .0 1.6 .4	398.7 56.7 .0 1.6 .5	531.3 56.7 .0 2.8 .2

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

### Table C-94a. Federal outlays for R&D plant, by agency: fiscal years 1990-2000

### [Dollars in millions]

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Total, all agencies											Г	age i oi z
Total, all agencies	Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
Departments:   Departments:   Departments:   Departments:   Departments   Departments   Department   Depart											1999	2000
Dept of Agriculture, total	Total, all agencies	2,015.8	2,546.1	2,784.5	3,144.5	2,177.6	2,032.4	1,865.6	1,994.8	1,861.1	2,004.7	2,122.7
Agricultural Research Svc         55.3         49.4         69.4         89.2         75.3         79.1         67.5         70.9         95.0         115.7         1           Animal & Plant Health         6.1         0	Departments:											
Inspection Service	Agricultural Research Svc											141.0 110.8
Ed, & Extension Service	Inspection Service	6.1	.0	.0	.0	.0	.0	1.5	.0	.0	.0	.0
National Institute of Standards & Technology   Standards & Standards & Technology   Standards	Ed, & Extension Service Foreign Agricultural Svc	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	25.2 .0 5.0
Standards & Technology		14.7	15.5	21.3	22.4	12.9	23.5	26.9	70.5	69.4	41.1	71.4
Atmospheric Administration 6.6 7.3 9.9 12.8 3 5 0 21.6 26.9 13.4 2  Department of Defense, total 436.8 433.7 410.9 373.2 261.0 81.0 114.7 52.4 39.7 61.9 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 200.2 218.2 186.3 231.0 153.7 26.9 54.2 25.4 37. 4.0 25.4 25.4 25.4 25.4 25.4 25.4 25.4 25.4	Standards & Technology	8.1	8.3	11.4	9.6	12.7	23.0	26.9	48.9	42.5	27.7	41.7
Department of the Air Force         200.2         218.2         186.3         231.0         153.7         26.9         54.2         25.4         3.7         4.0           Department of the Army         46.8         65.0         22.0         7.0         3.8         4.2         5.6         4.8         4.1         4.1           Department of the Navy         101.2         87.0         111.0         73.5         62.9         37.5         26.6         16.9         22.9         27.5         3.7           Defense Agencies         88.6         63.5         91.6         61.7         40.6         12.4         28.3         5.3         9.0         26.2           Department of Education         2.8         2.6         2.5         12.8         1.9         1.0         .1         .0         .0         .0           Department of Energy         856.9         1,099.8         1,198.0         1,483.2         921.8         864.1         809.9         806.7         776.3         834.9         90           Department of Health & Human         55.1         194.8         96.7         149.3         134.2         267.0         140.5         120.5         156.9         249.7         27         Food & Social Soc		6.6	7.3	9.9	12.8	.3	.5	.0	21.6	26.9	13.4	29.8
Department of Energy   856.9   1,099.8   1,198.0   1,483.2   921.8   864.1   809.9   806.7   776.3   834.9   900   900.7   9	Department of the Air Force  Department of the Army  Department of the Navy	200.2 46.8 101.2	218.2 65.0 87.0	186.3 22.0 111.0	231.0 7.0 73.5	153.7 3.8 62.9	26.9 4.2 37.5	54.2 5.6 26.6	25.4 4.8 16.9	3.7 4.1 22.9	4.0 4.1 27.5	38.5 2.4 1.8 31.0 3.4
Department of Health & Human   Services, total	Department of Education	2.8	2.6	2.5	12.8	1.9	1.0	.1	.0	.0	.0	.0
Services, total         55.1         194.8         96.7         149.3         134.2         267.0         140.5         120.5         156.9         249.7         25.7         20.0         10.0         18.4         14.3         19.7         21.9         16.7         5.5         8.7         13.0         22.0         13.0         22.0         14.4         1.6         7.7         7.9         9.0 <td>Department of Energy</td> <td>856.9</td> <td>1,099.8</td> <td>1,198.0</td> <td>1,483.2</td> <td>921.8</td> <td>864.1</td> <td>809.9</td> <td>806.7</td> <td>776.3</td> <td>834.9</td> <td>940.1</td>	Department of Energy	856.9	1,099.8	1,198.0	1,483.2	921.8	864.1	809.9	806.7	776.3	834.9	940.1
Bureau of Mines         3.0         1.5         .0         .0         .0         .0         NA	Services, total Food & Drug Administration HIth Resources & Svcs Admin National Insts of Health	1.0 .0 54.1	18.4 .0	14.3 .3 82.1	19.7 1.4 128.2	21.9 1.4 110.9	16.7 1.6 248.8	5.5 .7 134.3	8.7 .7 111.1	13.0 .9 143.0	22.0 .9 226.8	275.7 19.0 .8 255.9 NA
Coast Guard	Bureau of Mines Geological Survey Minerals Management Service Nat'l Biological Svc	3.0 1.3 .2 NA	1.5 2.9 .2 NA	.0 4.4 .7 NA	.0 4.0 1.0 .0	.0 6.3 1.1 .1	.0 5.3 1.0 .3	NA 1.1 1.0 NA	NA 4.8 1.8 NA	NA .0 1.6 NA	NA .0 1.3 NA	1.1 NA .0 1.1 NA .0
Federal Transit Admin    .0  .0  .0  2.2  .0  .0  .0  .0  .0  .0	Coast Guard Federal Aviation Admin Federal Highway Admin	.4 16.3	.4 16.5 .0	.4 15.9 .0	.5 25.6 .4	.5 11.7 3.8	.5 14.0 10.9	.5 6.0 6.1	.3 18.0 2.5	.3 18.9 1.1	.3 16.0 .5	15.6 .3 14.1 .8 .4 .0
Dept of the Treasury, total		.1	.1	.1	.2	1.9	.2	.2	.1	.1	.1	.1
Bureau of Engraving &	PrintingUS Customs Service			-					.1	.1	.1	.0 .1 .0
Department of Veterans Affairs 12.4 8.2 5.5 4.8 5.2 7.2 8.5 8.3 1.2 6.1	Department of Veterans Affairs	12.4	8.2	5.5	4.8	5.2	7.2	8.5	8.3	1.2	6.1	5.2

### Table C-94a. Federal outlays for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Other agencies:  Environmental Protection Agcy General Services Admin Nat'l Aero & Space Admin National Science Foundation Smithsonian Institution Tennessee Valley Authority	.0 .0 437.9 38.1 4.6 4.9	.0 3.6 603.8 56.5 4.5 3.7	.0 20.9 770.2 80.9 1.2 4.6	2.5 7.6 798.4 87.5 1.2 1.0	4.8 5.5 553.5 110.6 6.2 .0	3.0 1.3 515.4 101.0 6.0 .0	.0 4.1 480.0 158.0 4.0	22.0 1.6 442.0 318.0 3.0	21.0 .0 320.0 292.0 2.5 .0	89.0 .8 330.0 209.0 3.0 .0	114.0 .0 320.0 197.0 3.0 .0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-95. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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										Pa	age 1 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	29,620.6	31,386.1	34,589.6	37,822.4	40,009.0	44,012.1	50,180.4	52,951.2	57,099.7	58,826.5	63,571.6
Departments:											
Dept of Agriculture, total	685.7 NA 1.0 NA	744.5 1.6 1.3 NA	794.7 1.7 1.1 411.6	818.7 1.7 1.2 426.0	881.5 2.1 1.4 466.8	905.4 2.2 1.5 480.1	983.6 2.9 1.7 498.7	1,007.9 2.6 1.6 532.6	1,059.6 2.7 1.5 522.4	1,151.8 2.7 1.6 561.2	1,127.5 2.8 1.5 578.7
Inspection Service	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	6.2	7.7
Cooperative State Research, Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc Economics & Statistics Svc Forest Service	NA NA 35.5 NA 111.0	NA NA NA 31.1 115.2	199.4 39.3 NA NA 129.3	219.0 39.3 NA NA 112.5	242.3 38.8 NA NA 108.1	245.7 43.7 NA NA 108.8	294.3 46.4 NA NA 114.8	278.6 44.6 NA NA 114.0	338.3 44.8 NA NA 127.1	374.7 48.1 NA NA 138.4	339.4 49.5 NA NA 133.0
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.0 NA NA	.0 NA NA	.0 .0 7.5	.0 8.5 7.0	.0 8.2 7.6	.0 6.0 8.2	.9 6.7 8.4	1.0 12.8 8.0	1.2 6.8 3.4	1.0 8.2 3.6	1.1 8.4 2.9
Cooperation & Development Office of Transportation	.0 .7	5.3 .8	3.9 .9	2.6 .9	5.3 .8	8.2 1.0	7.7 1.2	7.0 1.0	5.6 1.1	5.0 1.1	2.5 NA
Science & Ed Admin, total	537.5 365.0 172.6	589.3 405.0 184.2	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	311.8 3.1 43.1 20.5	347.2 3.2 32.3 19.9	329.3 3.9 28.1 NA	337.3 3.8 9.6 NA	335.7 4.3 5.3 NA	367.6 4.4 5.1 NA	403.0 4.9 13.0 NA	408.4 4.7 10.3 NA	407.5 4.7 5.0 NA	400.2 5.7 4.2 NA	407.0 4.9 1.0 NA
Standards & Technology	69.3	76.4	83.0	89.9	95.7	104.9	104.7	108.5	100.7	118.7	124.2
National Oceanic & Atmospheric Administration National Telecommunications &	171.2	203.6	202.2	222.0	222.0	244.3	269.8	276.2	289.3	263.5	269.1
Information Administration Office of the Secretary Patent & Trademark Office	4.1 .1 .5	10.7 .6 .5	10.9 .0 1.1	11.3 - .7	8.3 - .0	8.7 .1 .0	9.1 1.4 .0	8.4 .3 .0	7.8 - .0	8.1 .0 .0	7.8 .0 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	12,776.4 4,693.1 2,772.5 4,403.1 878.4	14,189.2 5,319.0 2,993.8 4,789.3 1,049.2	16,786.3 7,128.8 3,257.0 5,103.9 1,255.6	20,913.1 9,442.6 3,785.2 6,001.0 1,643.3	23,305.3 10,951.3 4,024.4 6,209.9 2,058.1	25,902.1 12,377.0 4,281.7 7,779.0 1,405.7	30,322.4 13,552.2 4,623.7 9,309.5 2,786.3	33,224.1 13,723.9 4,863.3 9,747.9 4,771.9	35,708.7 15,618.0 5,085.2 9,576.8 5,291.8	35,684.6 15,011.0 4,898.8 9,588.9 5,957.3	38,076.2 15,487.6 5,704.5 9,755.7 6,973.3
Operational Test & Evaluation, Director Test & Evaluation, Deputy	NA	NA	NA	NA	NA	NA	NA	.0	8.4	68.2	14.4
Under Secretary of Defense	29.3	37.9	41.1	41.0	61.6	58.6	50.6	117.1	128.5	160.3	140.7
Department of Education	166.3	139.4	104.9	128.0	111.7	115.7	126.0	127.9	153.5	145.9	161.0
Department of Energy	5,483.2	5,777.8	5,896.4	5,622.2	5,294.4	5,526.0	5,834.4	5,430.6	5,529.4	5,951.4	6,065.6
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See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-95. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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										Pa	age 2 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total	3,558.4	3,810.8	3,950.9	3,965.4	4,400.4	4,861.8	5,493.2	5,695.5	6,643.0	7,177.6	7,981.4
Alcohol, Drug Abuse, & Mental Health Administration Centers for Disease Control &	214.4	233.5	239.7	251.4	304.0	337.5	377.9	396.6	476.1	554.8	695.7
Prevention Food & Drug Administration Health Care Financing Admin	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7	117.8
	66.7	76.6	72.6	75.0	102.7	80.8	95.1	87.4	85.8	91.5	122.0
	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2	49.1
Health Resources Admin	4.9	5.1	5.0	NA							
	NA	NA	NA	10.1	13.3	18.5	19.7	12.3	9.3	10.0	10.5
	28.7	26.7	20.3	NA							
	57.1	49.3	73.7	27.2	23.4	18.3	24.3	54.6	53.0	54.0	101.7
	3,000.8	3,211.2	3,355.5	3,452.6	3,806.8	4,285.2	4,856.5	5,034.5	5,886.2	6,309.9	6,833.8
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	34.6	29.9	33.1	16.1	16.6	18.1	18.6	17.3	21.2	21.0	27.2
	24.7	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7	7.8
	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7	15.8
Dept of Housing & Urban Dvlpmt	67.9	56.0	48.1	28.9	32.1	18.2	18.5	15.3	16.3	18.4	18.0
Dept of the Interior, total Bonneville Power Admin Bureau of Land Management Bureau of Mines Bureau of Reclamation	410.8	418.8	430.6	382.4	384.9	416.1	395.9	389.6	415.7	426.1	479.8
	.0	.0	14.4	NA							
	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.7	3.7	3.0
	121.3	114.4	97.4	94.8	88.6	108.8	89.9	84.4	88.8	91.3	101.2
	12.2	14.1	14.3	10.1	10.0	10.4	13.2	10.2	10.7	4.4	4.2
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining	145.6	146.3	169.8	152.6	158.4	209.9	215.7	219.5	227.6	236.9	281.1
	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2	2.2
	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4	19.4
	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.4	.4
Reclamation & Enforcement	5.0	7.8	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0	.7
Office of Water Rsch & Tech	28.0	30.0	21.8	12.3	2.2	3.6	NA	NA	NA	NA	NA
US Fish & Wildlife Service	87.1	94.1	93.3	94.2	97.7	63.3	52.4	50.5	64.3	67.8	67.5
Department of Justice, total Bureau of Prisons Drug Enforcement Admin Fed Bureau of Investigation Immigration & Naturalization	43.0	41.5	26.5	26.7	31.4	24.5	36.0	36.5	53.5	43.1	38.2
	3.4	2.1	2.5	1.7	1.7	1.6	1.5	3.0	7.1	6.0	5.1
	2.4	2.7	1.3	3.2	2.5	1.9	1.6	2.5	2.2	2.5	2.7
	3.1	1.4	.7	2.7	2.5	1.0	9.5	7.2	19.1	12.7	7.7
Service	.2	.3	.1	.6	.6	.6	.4	.4	.4	.3	.1
Office of Justice Programs	32.2	33.2	21.0	18.0	23.8	19.5	22.7	23.2	24.6	21.5	22.5
Office of Legal Policy	1.7	1.8	.8	.4	.3	.0	.3	.2	.1	.0	.0
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Labor-Management Relations &	137.0	138.1	62.2	25.4	19.9	16.3	13.3	10.4	21.6	35.6	35.4
	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0	7.0
	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1	.1
	120.8	121.7	52.4	16.1	9.0	6.1	3.5	3.5	5.7	14.9	15.7
Cooperative Programs  Labor-Management Services	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
AdministrationOccupational Safety & Health	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA	NA
Administration Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2	4.5
	1.6	1.4	1.1	.9	1.5	1.9	2.6	2.1	2.7	6.1	6.1
	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3	.3
Administration	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7	1.4
Department of State, total  Departmental Funds	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2	4.7
	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0	.0

### Table C-95. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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											igc 0 0i 0
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	392.7	384.5	434.5	322.0	369.6	465.2	437.9	397.5	336.2	318.5	318.9
	21.1	18.0	26.3	20.0	19.6	19.5	19.0	16.9	17.0	21.4	17.9
	120.4	108.8	128.9	99.4	147.6	282.6	294.8	271.5	177.7	173.8	162.3
	53.5	58.3	51.2	40.3	50.4	46.4	49.0	46.1	76.9	74.1	91.0
	56.1	56.4	46.1	24.5	16.5	19.2	15.0	15.4	11.2	10.4	9.0
Federal Transit Admin Maritime Administration	58.0	54.4	78.2	61.4	57.0	20.1	10.2	8.2	12.6	2.3	1.4
	NA	NA	14.2	11.1	15.0	9.9	13.9	9.4	5.8	.5	.0
National Highway Traffic Safety Administration Office of the Secretary	56.8	63.8	66.4	55.9	52.5	57.4	28.6	22.9	28.4	28.3	29.7
	11.7	10.8	10.1	3.3	4.9	4.9	4.8	5.1	4.5	5.7	5.5
Research & Special Programs Administration	15.0	14.0	13.1	6.1	6.2	5.2	2.7	2.0	2.1	2.1	2.0
Dept of the Treasury, total Bureau of Alcohol, Tobacco, &	9.6	12.1	11.4	13.4	15.6	13.9	24.4	24.2	27.0	26.2	25.7
Firearms Bureau of Engraving &	2.5	1.6	.3	NA 4.0	NA 2.0	NA 2.0	NA 5.0	NA 4.0	NA 4.5	NA 0.0	NA
Printing Internal Revenue Service US Customs Service	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0	1.7
	3.6	4.0	4.2	5.4	8.0	8.2	15.9	14.2	14.6	14.4	14.4
	1.4	3.9	3.5	3.2	3.4	1.9	2.3	4.9	7.1	9.3	6.9
United States Mint	.0	.0	.0	.0	.0	.0	.6	.3	.2	.1	2.0
United States Secret Service	NA	.4	.6	.0	.3	.2	.6	.5	.5	.4	.6
Department of Veterans Affairs	132.1	137.8	159.2	140.1	171.9	196.4	229.9	191.0	215.4	234.8	245.7
Other agencies:											
ACTIONAdvisory Commission on	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Intergovernmental Relations	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8	1.1
Appalachian Regional Comm	.9	.8	.4	.4	.2	.5	.2	.2	.1	.2	.8
Community Services Admin	20.7	30.3	18.3	NA							
Consumer Product Safety Comm	6.6	6.2	.5	.2	.5	1.3	2.4	2.0	2.2	1.1	1.3
Environmental Protection Agcy	412.5	345.0	325.7	335.1	240.7	261.2	320.4	317.3	348.2	347.4	380.3
Fed Communications Commission	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2	1.1
Federal Emergency Management Agency, total Federal Trade Commission General Services Admin	12.6	11.8	11.6	9.2	3.3	11.5	4.1	.0	.0	.0	.0
	1.5	3.0	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4	.4
	.5	.2	.6	1.0	.5	2.4	.4	20.0	1.6	2.3	.5
International Development Cooperation Agency, total Agcy for Internat'l Dvlpmt Interstate Commerce Commission Library of Congress Nat'l Aero & Space Admin	112.9	155.6	142.2	205.9	232.0	245.0	227.2	258.7	224.3	210.6	279.1
	112.9	155.6	142.2	205.9	232.0	245.0	227.2	258.7	224.3	210.6	279.1
	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
	5.9	6.9	4.9	5.7	7.4	7.5	7.1	6.6	6.5	7.1	8.0
	3,725.9	3,393.2	3,708.9	3,191.6	2,762.3	3,066.1	3,561.5	3,694.8	4,096.5	4,758.6	5,913.0
Nat'l Archives & Records Administration National Science Foundation Nuclear Regulatory Commission Office of Personnel Management Office of Thrift Supervision	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7	.3
	838.1	900.5	976.2	976.8	1,065.2	1,248.0	1,419.1	1,406.5	1,531.8	1,589.6	1,724.0
	157.4	190.4	227.3	220.3	207.3	190.7	150.0	123.8	122.5	108.5	114.8
	6.0	6.8	8.4	.0	.0	.0	.0	.0	.0	.0	.0
	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4	4.1
Smithsonian Institution Tennessee Valley Authority United States Arms Control &	37.9 89.2	41.9 80.7	45.3 69.3	52.9 85.3	57.0 63.3	63.8 68.3	72.7 80.0	64.0 78.3	74.4 78.2	75.8 87.7	83.6 62.8
Disarmament Agency US Information Agency US Internat'l Trade Comm	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	4.6	3.4	2.8
	.1	.1	1.5	.1	-	1.4	.1	2.0	3.5	.4	.1
	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1	8.7

**NOTES:** Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** - = Amount less than 50 thousand dollars

NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-95a. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 1 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all agencies	65,831.2	64,148.0	68,577.2	70,414.7	69,450.8	70,442.9	69,399.2	71,753.4	73,743.5	77,650.1	77,185.6
Departments:											
Dept of Agriculture, total	1,210.6 2.7 2.7 589.9	1,381.3 2.8 4.2 655.7	1,491.8 3.4 4.7 725.2	1,470.2 2.9 4.7 705.5	1,525.6 3.7 4.8 757.0	1,523.6 NA 4.8 751.0	1,428.7 NA 4.9 743.1	1,572.8 NA 4.8 806.6	1,530.8 NA 4.7 844.2	1,758.0 NA 4.7 948.7	1,709.0 NA 5.0 962.1
Inspection Service	14.0	15.7	16.7	17.1	19.2	19.1	19.5	19.8	20.5	20.0	20.0
Cooperative State Research, Ed, & Extension Service Economic Research Service Food Safety Inspection Svc Foreign Agricultural Svc Forest Service	371.1 50.5 .0 .0 163.5	438.3 54.4 .0 .0 193.1	481.2 58.9 .0 .0 184.3	479.2 58.9 .0 .0 186.3	471.6 55.2 .0 1.1 198.0	489.0 53.8 .0 .9 197.8	418.9 53.0 - 1.3 180.4	496.7 53.0 - 1.4 181.8	387.3 71.5 .2 1.4 190.4	506.2 65.0 .2 1.4 202.4	451.0 55.6 .2 1.4 202.4
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.6 9.0 2.8	.7 9.9 3.2	1.5 10.7 3.6	1.8 8.4 3.9	1.8 7.0 3.9	1.5 NA 4.0	2.5 NA 3.8	2.8 NA 3.4	2.7 NA 3.3	2.7 NA 3.2	3.4 NA 3.2
Cooperation & Development Rural Business-Coop Svc	3.6 NA	3.1 NA	1.5 NA	1.5 NA	.0 2.4	NA 1.6	NA 1.4	NA 2.5	NA 4.4	NA 3.5	NA 4.5
Department of Commerce, total Bureau of the Census Economic Development Admin National Institute of	453.5 6.9 1.2	505.4 6.6 1.4	672.2 5.3 .5	681.7 5.4 .0	857.3 4.8 .6	1,213.7 4.9 .5	1,152.0 6.3 .6	1,046.5 5.1 .6	996.9 8.6 .6	1,197.0 16.3 .6	1,162.5 8.3 .6
Standards & Technology National Oceanic &	131.0	148.4	190.2	219.8	284.1	640.5	601.0	482.1	415.7	583.2	566.0
Atmospheric Administration	306.7	345.3	472.2	452.4	562.9	561.4	528.5	530.9	546.4	572.8	561.5
National Telecommunications & Information Administration Office of the Secretary	7.7 .0	3.6 .0	4.0 .0	4.2 .0	4.8 .0	6.4	15.7 -	27.8 .0	25.5 .0	24.2 .0	26.3 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	37,755.5 15,153.6 5,737.2 9,646.6 6,996.8	32,560.5 11,089.8 6,172.5 7,860.0 7,200.9	36,526.0 13,606.8 6,876.2 8,126.8 7,670.5	36,220.7 12,866.9 6,227.2 9,148.3 7,723.3	34,818.9 12,626.8 5,576.2 9,005.1 7,367.8	33,856.8 11,835.7 5,424.7 8,974.5 7,369.1	34,582.2 13,066.5 4,879.7 8,614.4 7,742.0	34,873.8 13,990.6 4,825.2 8,252.5 7,509.1	35,352.0 13,865.2 5,041.7 8,190.8 7,981.9	35,745.3 13,570.9 5,185.3 8,740.7 7,980.0	34,474.7 14,382.3 4,501.3 8,225.7 7,086.8
Operational Test & Evaluation, Director Test & Evaluation, Deputy	32.6	13.6	12.4	12.3	11.2	21.7	21.9	26.6	30.3	31.8	25.4
Under Secretary of Defense	188.7 178.8	223.7 175.2	233.2 170.9	242.5 179.9	231.8 178.4	231.0 179.4	257.7 173.7	269.7 181.2	242.0 204.5	236.6 221.8	253.1 272.1
Department of Education  Department of Energy	6.546.6	7.203.2	7.493.0	7.723.7	6.959.8	6.890.0	6.050.8	6.332.8	6.600.9	7,347.3	7.458.4
Department of Lifetgy	0,540.6	1,200.2	7,433.0	1,123.1	0,555.0	0,090.0	0,030.6	0,332.0	0,000.9	1,041.3	7,430.4

## Table C-95a. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 2 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Department of Health & Human Services, total Administration on Aging Administration for Children	8,513.4 NA	9,842.3 20.6	9,084.6 20.2	10,498.5 20.9	11,141.7 19.1	11,711.0 20.7	12,084.2 3.7	13,045.3 4.4	13,990.5 10.4	16,009.0 18.4	16,361.4 18.4
& Families	NA	129.0	39.2	19.9	11.3	12.0	12.6	17.4	23.5	18.8	28.0
& ResearchAlcohol, Drug Abuse, & Mental	49.7	101.1	106.3	114.8	154.4	135.3	125.2	144.0	146.5	171.0	206.3
Health Administration	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention	95.6 122.0 49.1 11.9 95.4	113.4 143.5 69.1 11.0 NA	146.9 150.0 75.5 10.5 NA	162.5 174.2 68.2 11.0 NA	206.8 177.8 80.0 17.8 NA	317.4 175.8 74.5 14.8 NA	176.4 52.7	323.0 173.1 43.6 13.8 NA	343.6 171.0 51.2 13.8 NA	382.6 152.6 50.0 13.8 NA	468.6 183.5 55.0 13.9 NA
National Insts of Health Office of the Assistant	7,221.3	7,763.4	8,491.4	9,893.3	10,439.9	10,930.6	11,377.9	12,237.9	13,137.5	15,108.1	15,289.2
Secretary for Health Off of the Secretary, total Office of the Assistant	6.9 5.0	10.0 8.8	6.7 5.0	1.2 8.0	.8 11.7	.3 9.1	NA 10.7	NA 19.0	NA 17.0	NA 17.7	NA 18.5
Sec, Planning & Eval Office of Public Health &	NA	NA	NA	NA	NA	NA	9.0	18.4	13.9	14.0	14.0
Science	NA	NA	NA	NA	NA	NA	1.7	.6	3.1	3.7	4.5
Social Security Admin Substance Abuse & Mental	13.9	11.9	33.0	24.5	22.2	20.4	NA	NA	NA	NA	NA
Health Services Admin <sup>1</sup>	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0	80.0
Dept of Housing & Urban Dvlpmt	19.3	27.8	25.1	23.6	39.6	41.8	33.1	33.5	28.0	59.4	50.6
Dept of the Interior, total  Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	522.6 2.8 102.3 5.8 309.7	615.1 8.8 108.2 8.7 359.8	627.6 6.3 107.1 13.2 365.7	642.2 8.9 111.9 10.3 360.4	703.1 .0 107.9 7.4 377.4	568.3 .0 .0 8.0 367.4	569.5 .0 NA 6.5 520.1	587.1 .0 NA 7.1 531.2	533.5 .0 NA 8.8 464.1	565.2 .0 NA 8.1 497.2	585.7 .0 NA 9.9 514.3
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	2.0 NA 20.1 .2	2.9 NA 27.5 .6	4.8 NA 31.1 .9	6.9 .0 38.1 .4	21.8 164.2 24.2 .1	21.0 152.1 19.7	22.6 NA 20.2 .0	22.8 NA 26.0 .0	30.8 NA 29.7 .0	30.2 NA 29.7 .0	29.7 NA 31.8 .0
Reclamation & Enforcement US Fish & Wildlife Service	.7 78.9	1.0 97.6	.3 98.2	.5 104.8	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Justice, total	40.5 4.5 2.4 8.2	48.9 5.2 2.7 10.8	48.0 5.9 1.4 10.9	48.9 6.1 .9 11.3	45.0 5.4 .9 7.0	57.9 5.7 .4 10.9	77.3 5.2 1.2 33.5	84.7 4.6 - 35.5	100.6 8.1 .0 35.8	110.2 7.8 .0 36.2	81.8 8.0 .0 36.2
ServiceOffice of Justice Programs	.4 25.0	.4 29.8	.4 29.4	.4 30.2	.4 31.4	.4 40.5	.2 37.2	.4 44.2	.0 56.7	.5 65.7	.5 37.1
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Occupational Safety & Health Administration	73.0 7.3 .1 53.4	44.0 7.5 .0 22.1 2.6	51.7 7.6 .0 31.7	55.0 6.9 .0 35.9	59.7 7.1 .0 40.0	55.4 14.8 .0 25.6	13.3 .0 26.9	35.1 12.6 .0 14.1 5.5	27.8 12.4 .0 7.2 4.6	26.7 12.4 .0 6.6	25.9 12.4 .0 4.4 5.3
Office of the Secretary	7.1	8.7	5.9	5.8	5.3	6.3		.2	.2	.2	.2
Pension Benefit Guaranty Corp Pension & Welfare Benefits	.5	.5	.9	1.3	1.3	.8	.7	.7	.6	.7	.7
Administration	2.1	2.5	2.6	2.6	2.7	3.6		2.0	2.7	1.8	3.0
Department of State <sup>2</sup>	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	.9	1.0	1.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-95a. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 3 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Dept of Transportation, total	388.3 20.6 237.5 91.5 10.2	398.3 25.9 236.4 86.9 17.6	470.3 20.5 260.2 131.0 22.8	577.6 33.4 271.3 175.7 26.8	661.7 22.8 318.6 242.0 20.6	755.8 20.2 310.1 315.6 30.1	584.3 20.5 228.9 247.3 30.1	545.9 23.3 226.3 211.2 19.5	583.7 20.7 242.3 229.3 22.6	717.5 18.2 225.5 355.6 26.2	943.4 22.9 246.5 559.7 24.4
Federal Transit Admin Maritime Administration National Highway Traffic	1.6 .9	1.7 1.7	1.7 1.8	31.3 1.7	19.9 1.7	28.7 2.5	13.7 .0	17.0 .0	17.6 .0	22.2 .0	19.2 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 6.8	21.4 4.3	25.8 4.1	31.6 4.5	25.3 5.4	39.7 3.9	33.2 2.8	36.4 3.5	41.6 3.4	50.4 9.6	58.7 4.5
Administration	2.4	2.4	2.5	1.3	5.3	5.0	7.7	8.7	6.3	9.7	7.5
Dept of the Treasury, total	25.7	31.0	24.8	16.8	19.1	61.5	60.2	59.8	65.2	72.2	86.4
PrintingFinancial Crimes Enforcement	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	2.8	2.4	2.4
Network	.0 16.8 .0	2.3 17.9 3.0	1.2 17.9 .8	1.5 6.5 .7	.0 11.3 .5	.0 49.7 .6	.0 51.2 .5	.0 50.8 .6	.0 52.0 .7	.0 58.8 .8	.0 73.7 .9
US Customs Service United States Mint United States Secret Service	6.3 .1 .5	3.8 .1 .4	2.3 .0 .6	4.1 .1 .6	4.6 .5 .5	8.6 .3 .6	6.3 .0 .5	6.3	9.2 .1 .5	9.0 .7 .5	8.4 .5 .6
Department of Veterans Affairs	241.0	220.0	229.6	239.5	259.7	245.1	259.9	284.0	277.5	320.8	317.0
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.5 .4 1.1 419.7 1.3	1.7 .7 1.3 432.6 1.4	1.7 1.9 1.1 483.9 1.6	2.1 .9 1.2 497.8 1.6	1.4 .9 .3 558.3 1.7	1.4 .9 .4 556.3 2.3	NA .9 - 464.3 2.8	NA .9 .1 517.2 3.1	NA .7 .0 637.2 3.0	NA .7 .1 661.9 4.2	NA .8 1.3 644.9 2.7
Federal Trade Commission General Services Admin	.5 19.5	1.0 22.6	1.3 6.5	.9 1.0	.7 .3	.6 5.1	.5 .1	.7	1.1 .0	1.1	1.4 .0
Cooperation Agency, total	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	212.0	209.3	194.1
Development <sup>3</sup>	334.6 8.4	377.7 9.0	365.9 10.3	382.2 10.5	254.3 10.0	302.5 10.2	223.0 10.6	206.4 2.4	212.0 1.5	209.3 2.1	194.1 1.8
Nat'l Aero & Space Admin Nat'l Archives & Records Admin National Science Foundation Nuclear Regulatory Commission Office of Thrift Supervision	7,060.3 .4 1,728.8 108.8 4.1	8,003.8 .7 1,944.8 108.8 NA	8,475.4 .7 1,970.0 119.0 NA	8,769.2 .3 2,012.3 119.8 NA	8,811.5 .3 2,212.2 90.7 NA	9,639.7 .1 2,438.9 88.2 NA	8,987.5 .1 2,375.5 70.9 NA	9,661.1 .1 2,452.3 62.1 NA	9,918.0 .1 2,473.7 51.7 NA	9,669.4 .1 2,714.0 49.2 NA	9,695.2 .1 2,889.5 46.6 NA
Smithsonian Institution Social Security Admin Tennessee Valley Authority	88.8 NA 69.8	99.5 NA 73.1	101.8 NA 100.5	107.0 NA 109.6	129.2 NA 97.9	129.0 NA 93.1	132.0 11.5 6.1	134.0 13.6 8.9	123.0 17.4 2.7	126.0 53.7 .0	133.0 36.9 .0

#### Table C-95a. Federal obligations for research and development and for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
United States Arms Control & Disarmament Agency <sup>2</sup> US Information Agency US Internat'l Trade Comm	0.2 .5 9.1	0.4 .1 9.9	2.1 .0 12.3	1.5 1.1 12.2	1.3 .6 9.4	1.1 .3 12.2	0.7 .1 3.2	1.2 .2 5.7	1.2 .3 7.2	0.1 .1 6.9	.0 0.1 7.1

- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-96. Federal obligations for research and development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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Agency and subdivision 1979 1980 1981 1982  Total, all agencies	1983 38,711.5	1984	1985	1986	1987	1988	1989
Total, all agencies	38,711.5						
		42,224.9	48,359.6	51,412.4	55,253.7	56,769.4	61,406.5
Departments:							
Dept of Agriculture, total         663.0         687.6         774.0         797.3           Agricultural Cooperative Svc         NA         1.6         1.7         1.7           Agricultural Marketing Svc         1.0         1.3         1.1         1.2           Agricultural Research Svc         NA         NA         NA         394.1         404.9           Animal & Plant Health         Inspection Service         .0         .0         .0         .0	847.6 2.1 1.4 443.4	866.2 2.2 1.5 451.3	943.0 2.9 1.7 469.7	928.5 2.6 1.6 463.4 4.2	947.9 2.7 1.5 478.6	1,016.6 2.7 1.6 505.7	1,038.3 2.8 1.5 523.5
·							
Cooperative State Research, Ed, & Extension Service         NA         NA         199.4         219.0           Economic Research Service         NA         NA         39.3         39.3           Economics, Stat, & Coop Svc         35.5         NA         NA         NA           Economics & Statistics Svc         NA         31.1         NA         NA           Forest Service         107.5         111.5         126.1         112.1	232.3 38.8 NA NA 107.7	235.7 43.7 NA NA 108.4	284.3 46.4 NA NA 113.1	269.0 44.6 NA NA 113.3	270.7 44.8 NA NA 126.7	298.4 48.1 NA NA 135.5	307.3 49.5 NA NA 131.4
Grain Inspection Packers & Stockyards Administration         .0 <td>.0 8.2 7.6</td> <td>.0 6.0 8.2</td> <td>.9 6.7 8.4</td> <td>1.0 12.8 8.0</td> <td>1.2 6.8 3.4</td> <td>1.0 8.2 3.6</td> <td>1.1 8.4 2.9</td>	.0 8.2 7.6	.0 6.0 8.2	.9 6.7 8.4	1.0 12.8 8.0	1.2 6.8 3.4	1.0 8.2 3.6	1.1 8.4 2.9
Cooperation & Development          .0         5.3         3.9         2.6           Office of Transportation          .7         .8         .9         .9	5.3 .8	8.2 1.0	7.7 1.2	7.0 1.0	5.6 1.1	5.0 1.1	2.5 NA
Science & Ed Admin, total         518.4         536.0         NA         NA           Agricultural Research Svc         345.8         351.8         NA         NA           Cooperative State Rsch Svc         172.6         184.2         NA         NA	NA NA NA						
Department of Commerce, total       309.4       342.5       327.9       336.3         Bureau of the Census       3.1       3.2       3.9       3.8         Economic Development Admin       43.1       32.3       28.1       9.6         Maritime Administration       19.6       19.4       NA       NA         National Institute of Standards & Technology       67.8       76.2       82.5       88.8	335.0 4.3 5.3 NA 95.0	358.2 4.4 5.1 NA 95.5	398.8 4.9 13.0 NA 100.5	399.2 4.7 10.3 NA 100.8	402.2 4.7 5.0 NA 98.6	388.9 5.7 4.2 NA 107.9	397.9 4.9 1.0 NA 115.5
	00.0	00.0	100.0	100.0	00.0	107.0	110.0
National Oceanic & Atmospheric Administration 171.2 199.8 201.4 222.0 National Telecommunications &	222.0	244.3	269.8	274.7	286.1	263.0	268.6
Information Administration         4.1         10.7         10.9         11.3           Office of the Secretary         .1         .6         .0         -           Patent & Trademark Office         .5         .5         1.1         .7	8.3 - .0	8.7 .1 .0	9.1 1.4 .0	8.4 .3 .0	7.8 - .0	8.1 .0 .0	7.8 .0 .0
Department of Defense, total       12,506.2       13,981.0       16,508.6       20,622.6         Department of the Air Force       4,525.6       5,211.0       6,969.2       9,357.9         Department of the Army       2,768.7       2,980.0       3,244.2       3,760.5         Department of the Navy       4,335.0       4,706.1       5,006.0       5,845.1         Defense Agencies       847.6       1,046.0       1,248.2       1,618.1	22,992.8 10,812.6 3,998.1 6,068.2 2,052.3	25,372.9 12,091.6 4,225.5 7,605.6 1,391.5	29,791.5 13,260.9 4,570.8 9,127.4 2,781.7	32,937.9 13,593.8 4,809.4 9,650.3 4,767.4	35,231.5 15,347.7 5,019.5 9,507.8 5,219.7	35,248.9 14,867.3 4,806.0 9,514.1 5,832.9	37,576.9 15,237.4 5,659.3 9,666.1 6,858.9
Operational Test & Evaluation, Director NA NA NA NA Test & Evaluation, Deputy	NA	NA	NA	.0	8.4	68.2	14.4
Under Secretary of Defense 29.3 37.9 41.1 41.0	61.6	58.6	50.6	117.1	128.5	160.3	140.7
Department of Education	111.7	115.7	124.9	121.3	132.5	140.7	159.1
Department of Energy	4,536.7	4,673.6	4,966.0	4,688.3	4,757.2	5,036.4	5,192.6

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

## Table C-96. Federal obligations for research and development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 2 of 3
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total Alcohol, Drug Abuse, & Mental Health Administration Centers for Disease Control &	3,504.9 214.3	3,780.2 233.5	3,927.1	3,940.7	4,352.5	4,830.7 337.2	5,451.0 377.6	5,657.6 396.1	6,606.3 475.5	7,158.0 554.8	7,902.8 695.7
Prevention Food & Drug Administration Health Care Financing Admin	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7	117.8
	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0	99.0
	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2	49.1
Health Resources Admin  HIth Resources & Svcs Admin  Health Services Admin  Human Development Services  National Insts of Health	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	10.1	13.3	18.5	19.7	12.3	9.3	10.0	10.5
	28.7	26.7	20.3	NA	NA	NA	NA	NA	NA	NA	NA
	57.1	49.3	73.7	27.2	23.4	18.3	24.3	54.6	53.0	54.0	101.7
	2,953.1	3,181.8	3,333.2	3,433.1	3,789.2	4,257.4	4,827.7	5,005.1	5,850.9	6,290.9	6,778.3
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	34.6	29.9	33.1	16.1	16.6	18.1	18.6	17.3	21.2	21.0	27.2
	24.7	24.0	19.5	13.4	14.4	10.4	9.6	6.1	8.2	4.7	7.8
	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7	15.8
Dept of Housing & Urban Dvlpmt	67.9	56.0	48.1	28.9	32.1	18.2	18.5	15.3	16.3	18.4	18.0
Dept of the Interior, total Bonneville Power Admin Bureau of Land Management Bureau of Mines Bureau of Reclamation	405.8	411.3	427.1	381.1	382.5	410.9	391.7	385.2	403.8	416.8	469.0
	.0	.0	14.2	NA	NA	NA	NA	NA	NA	NA	NA
	1.3	1.7	1.9	5.3	3.9	3.8	4.4	3.4	3.7	3.7	3.0
	121.0	113.4	96.7	94.7	88.5	108.8	89.9	84.4	88.8	91.3	98.7
	12.2	14.1	14.3	10.1	10.0	10.4	13.2	10.2	10.7	4.4	4.2
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining	145.6	146.3	169.8	152.6	157.0	208.9	214.9	218.6	226.8	236.1	279.9
	NA	NA	NA	.0	1.5	1.5	1.4	1.1	1.0	1.2	2.2
	8.9	8.2	10.4	11.2	13.7	14.0	15.0	17.3	18.5	19.4	19.4
	1.4	2.2	1.5	.5	7.4	.1	1.9	1.0	.0	.4	.4
Reclamation & Enforcement	5.0	7.5	5.8	1.5	1.5	.8	2.0	2.3	1.0	1.0	.7
Office of Water Rsch & Tech	27.2	29.3	21.1	11.4	2.2	3.6	NA	NA	NA	NA	NA
US Fish & Wildlife Service	83.1	88.6	91.5	93.9	96.7	59.1	49.0	47.0	53.3	59.2	60.6
Department of Justice, total	43.0	41.5	26.5	26.7	31.4	24.5	36.0	36.5	42.4	43.1	38.2
	3.4	2.1	2.5	1.7	1.7	1.6	1.5	3.0	7.1	6.0	5.1
	2.4	2.7	1.3	3.2	2.5	1.9	1.6	2.5	2.2	2.5	2.7
	3.1	1.4	.7	2.7	2.5	1.0	9.5	7.2	8.0	12.7	7.7
Service	.2	.3	.1	.6	.6	.6	.4	.4	.4	.3	.1
Office of Justice Programs Office of Legal Policy	32.2 1.7	33.2 1.8	21.0 .8	18.0 .4	23.8 .3	19.5 .0	22.7 .3	23.2	24.6 .1	21.5 .0	22.5 .0
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Labor-Management Relations &	137.0	138.1	62.2	25.4	19.9	16.3	13.3	10.4	21.6	35.6	35.4
	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0	7.0
	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1	.1
	120.8	121.7	52.4	16.1	9.0	6.1	3.5	3.5	5.7	14.9	15.7
Cooperative Programs	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
Labor-Management Services Administration Occupational Safety & Health	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA	NA
Administration	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2	4.5
	1.6	1.4	1.1	.9	1.5	1.9	2.6	2.1	2.7	6.1	6.1
	NA	NA	.5	1.1	1.1	.3	.2	.1	.3	.3	.3
Administration	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7	1.4
Department of State, total  Departmental Funds	3.2	2.2	1.8	1.5	1.5	1.6	1.5	1.5	3.0	4.2	4.7
	3.2	2.2	1.8	.0	.0	.0	.0	.0	.0	.0	.0

#### Table C-96. Federal obligations for research and development, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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											igc 0 0i 0
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total	370.1	361.2	415.5	310.1	347.7	448.3	428.9	385.5	325.0	304.6	303.3
	21.1	18.0	26.3	20.0	19.6	19.5	19.0	16.9	17.0	21.1	17.9
	110.5	103.1	120.0	94.3	126.2	266.2	286.3	260.6	167.3	160.5	146.8
	52.9	51.1	51.2	40.3	50.4	46.4	49.0	45.5	76.7	74.1	91.0
	44.2	46.2	36.6	18.2	16.5	19.2	15.0	15.4	11.2	10.0	9.0
Federal Transit Admin Maritime Administration	58.0	54.4	78.2	61.4	57.0	20.1	10.2	8.2	12.6	2.3	1.4
	NA	NA	14.2	11.1	15.0	9.9	13.9	9.4	5.8	.5	.0
National Highway Traffic Safety Administration Office of the Secretary	56.6	63.6	65.9	55.4	52.0	56.9	28.1	22.4	27.9	28.3	29.7
	11.7	10.8	10.1	3.3	4.9	4.9	4.8	5.1	4.5	5.7	5.5
Research & Special Programs Administration	15.0	14.0	13.1	6.1	6.2	5.2	2.7	2.0	2.1	2.1	2.0
Dept of the Treasury, total Bureau of Alcohol, Tobacco, &	9.5	12.0	11.3	13.3	15.6	13.9	24.3	24.0	26.9	26.1	25.6
FirearmsBureau of Engraving &	2.5	1.6	.3	NA	NA	NA	NA 5.0	NA	NA	NA	NA
Printing Internal Revenue Service US Customs Service	2.1	2.3	2.7	4.8	3.9	3.6	5.0	4.2	4.5	2.0	1.7
	3.6	4.0	4.2	5.4	8.0	8.2	15.9	14.2	14.6	14.4	14.4
	1.3	3.8	3.5	3.1	3.3	1.8	2.2	4.8	7.0	9.2	6.8
United States Mint	.0	.0	.0	.0	.0	.0	.6	.3	.2	.1	2.0
United States Secret Service	NA	.4	.6	.0	.3	.2	.6	.4	.5	.4	.6
Department of Veterans Affairs	127.0	133.4	144.4	137.3	161.4	190.3	226.6	186.2	209.5	215.3	234.7
Other agencies:											
ACTIONAdvisory Commission on	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Intergovernmental Relations	1.7	2.2	2.2	2.0	2.1	2.1	2.4	2.1	1.9	1.8	1.1
	.9	.8	.4	.4	.2	.5	.2	.2	.1	.2	.8
	20.7	30.3	18.3	NA							
	3.9	3.5	.5	.2	.5	1.3	2.4	2.0	2.2	1.1	1.3
Environmental Protection Agcy	410.1	345.0	325.7	335.1	240.7	261.2	320.4	317.3	348.2	347.4	380.3
Fed Communications Commission	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2	1.1
Federal Emergency Management Agency, total Federal Trade Commission General Services Admin	12.6	11.8	11.6	9.2	3.3	11.5	4.1	.0	.0	.0	.0
	1.5	3.0	1.1	1.2	1.4	1.6	1.7	1.8	.5	.4	.4
	.5	.2	.6	1.0	.5	2.4	.4	1.2	1.6	2.3	.5
International Development Cooperation Agency, total Agcy for Internat'l Dvlpmt Interstate Commerce Commission Library of Congress Nat'l Aero & Space Admin	106.5	149.3	134.2	199.9	227.3	237.2	220.4	251.2	217.5	204.4	279.1
	106.5	149.3	134.2	199.9	227.3	237.2	220.4	251.2	217.5	204.4	279.1
	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
	5.9	6.9	4.9	5.7	7.4	7.5	7.1	6.6	6.5	7.1	8.0
	3,578.4	3,234.1	3,593.2	3,077.9	2,661.6	2,821.9	3,327.2	3,419.8	3,787.1	4,330.4	5,393.5
Nat'l Archives & Records Administration National Science Foundation Nuclear Regulatory Commission Office of Personnel Management Office of Thrift Supervision	NA	NA	NA	NA	NA	NA	.5	1.0	1.1	.7	.3
	807.9	881.8	961.6	975.3	1,062.0	1,202.8	1,345.6	1,353.3	1,470.5	1,532.8	1,670.4
	148.8	182.7	219.7	220.3	207.3	190.7	150.0	123.8	122.5	108.5	114.8
	6.0	6.8	8.4	.0	.0	.0	.0	.0	.0	.0	.0
	.9	1.2	1.0	2.7	3.0	2.6	2.8	3.3	3.4	3.4	4.1
Smithsonian Institution Tennessee Valley Authority United States Arms Control &	36.9 38.4	41.0 80.1	44.9 68.9	52.4 85.0	56.0 63.0	63.6 68.1	71.1 79.5	63.3 77.5	71.5 77.9	75.1 87.3	80.2 62.6
Disarmament Agency US Information Agency US Internat'l Trade Comm	3.5	3.8	2.4	1.9	1.0	1.3	1.1	.9	3.6	3.4	2.8
	.1	.1	1.5	.1	-	1.4	.1	2.0	3.5	.4	.1
	3.4	2.1	3.4	3.8	4.7	5.0	5.8	6.9	7.2	8.1	8.7

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-96a. Federal obligations for research and development, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 1 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all agencies	63,559.5	61,295.2	65,592.6	67,314.0	67,235.4	68,186.8	67,653.0	69,826.8	71,903.3	75,351.3	75,104.3
Departments:											
Dept of Agriculture, total	1,108.4 2.7 2.7 545.5	1,236.6 2.8 4.2 591.0	1,327.1 3.4 4.7 627.1	1,327.8 2.9 4.7 627.2	1,399.9 3.7 4.8 678.7	1,380.2 NA 4.8 683.3	1,300.3 NA 4.9 675.2	1,388.6 NA 4.8 687.6	1,441.0 NA 4.7 757.9	1,637.2 NA 4.7 832.9	1,597.7 NA 5.0 855.9
Inspection Service	8.0	15.7	16.7	17.1	19.2	19.1	18.0	19.8	20.5	20.0	20.0
Cooperative State Research, Ed, & Extension Service Economic Research Service Food Safety Inspection Svc Foreign Agricultural Svc Forest Service	324.2 50.5 .0 .0 158.6	376.8 54.4 .0 .0 174.7	418.2 58.9 .0 .0 180.7	418.6 58.9 .0 .0 182.7	429.0 55.2 .0 1.1 193.1	417.7 53.8 .0 .9 193.5	362.4 53.0 - 1.3 177.9	433.5 53.0 - 1.4 179.8	386.4 71.5 .2 1.4 187.8	506.2 65.0 .2 1.4 197.4	451.0 55.6 .2 1.4 197.4
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.6 9.0 2.8	.7 9.9 3.2	1.5 10.7 3.6	1.8 8.4 3.9	1.8 7.0 3.9	1.5 NA 4.0	2.5 NA 3.8	2.8 NA 3.4	2.7 NA 3.3	2.7 NA 3.2	3.4 NA 3.2
Cooperation & Development Rural Business-Coop Svc	3.6 NA	3.1 NA	1.5 NA	1.5 NA	.0 2.4	NA 1.6	NA 1.4	NA 2.5	NA 4.4	NA 3.5	NA 4.5
Department of Commerce, total  Bureau of the Census  Economic Development Admin  National Institute of	438.2 6.9 1.2	489.6 6.6 1.4	651.2 5.3 .5	656.3 5.4 .0	826.1 4.8 .6	1,136.0 4.9 .5	1,067.5 6.3 .6	1,003.1 5.1 .6	948.6 8.6 .6	1,044.6 16.3 .6	1,026.0 8.3 .6
Standards & Technology National Oceanic &	122.3	140.0	179.0	207.2	253.2	563.3	516.5	460.4	394.4	444.2	459.2
Atmospheric Administration	300.1	338.0	462.4	439.5	562.6	560.9	528.5	509.3	519.5	559.4	531.7
National Telecommunications & Information Administration Office of the Secretary	7.7 .0	3.6 .0	4.0 .0	4.2 .0	4.8 .0	6.4	15.7 -	27.8 .0	25.5 .0	24.2 .0	26.3 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	37,268.1 14,831.4 5,684.1 9,586.2 6,945.2	32,134.8 10,937.5 6,081.5 7,806.0 7,072.5	36,129.5 13,427.1 6,854.2 8,030.8 7,571.7	35,849.1 12,635.3 6,209.1 9,102.9 7,647.0	34,553.2 12,527.4 5,574.1 8,929.0 7,279.7	33,796.3 11,797.9 5,419.3 8,963.3 7,363.2	34,535.4 13,042.1 4,873.6 8,606.4 7,733.8	34,788.3 13,951.5 4,821.1 8,215.5 7,503.8	35,286.2 13,839.1 5,037.7 8,156.3 7,980.8	35,636.9 13,523.7 5,181.2 8,704.9 7,958.7	34,441.2 14,360.2 4,501.1 8,214.6 7,086.8
Operational Test & Evaluation, Director Test & Evaluation, Deputy Under Screens to Left Defense	32.6 188.7	13.6 223.7	12.4 233.2	12.3 242.5	11.2 231.8	21.7 231.0	21.9 257.7	26.6 269.7	30.3 242.0	31.8 236.6	25.4 253.1
Under Secretary of Defense  Department of Education	169.9	171.0	168.5	177.7	176.6	177.6	173.7	181.2	204.5	230.0	272.1
Department of Energy	5.630.6	5.983.1	6.172.2	6.262.1	6.048.0	6.145.0	5.344.9	5.603.5	5.873.8	6.499.2	6.518.2
Dopartificity Citety	5,550.0	5,505.1	0,172.2	0,202.1	0,040.0	0,140.0	0,044.3	0,000.0	0,070.0	0,400.2	0,010.2

## Table C-96a. Federal obligations for research and development, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 2 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Department of Health & Human Services, total	8,405.6 NA	9,756.0 20.6	8,987.8 20.2	10,349.2 20.9	11,021.5 19.1	11,455.2 20.7	11,951.1 3.7	12,785.3 4.4	13,704.2 10.4	15,629.4 18.4	16,147.5 18.4
& Families	NA	129.0	39.2	19.9	11.3	12.0	12.6	17.4	23.5	18.8	28.0
& ResearchAlcohol, Drug Abuse, & Mental	49.7	101.1	106.3	114.8	154.4	135.3	125.2	144.0	146.5	171.0	206.3
Health Administration	842.7	1,460.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Centers for Disease Control & Prevention Food & Drug Administration Health Care Financing Admin Hth Resources & Svcs Admin Human Development Services	95.6 99.0 49.1 11.9 95.4	113.4 125.0 69.1 11.0 NA	146.9 135.7 75.5 10.1 NA	162.5 154.5 68.2 9.6 NA	206.8 169.4 80.0 16.4 NA	317.4 170.5 74.5 13.2 NA	170.8 52.7	323.0 158.6 43.6 13.1 NA	343.6 142.9 51.2 12.9 NA	382.6 141.2 50.0 13.0 NA	468.6 151.7 55.0 13.1 NA
National Insts of Health Office of the Assistant	7,136.5	7,695.5	8,409.2	9,765.1	10,329.4	10,681.8	11,251.0	11,993.0	12,880.2	14,740.7	15,107.9
Secretary for Health Off of the Secretary, total Office of the Assistant	6.9 5.0	10.0 8.8	6.7 5.0	1.2 8.0	.8 11.7	.3 9.1	NA 10.7	NA 19.0	NA 17.0	NA 17.7	NA 18.5
Sec, Planning & Eval Office of Public Health &	NA	NA	NA	NA	NA	NA	9.0	18.4	13.9	14.0	14.0
Science	NA	NA	NA	NA	NA	NA	1.7	.6	3.1	3.7	4.5
Social Security Admin	13.9	11.9	33.0	24.5	22.2	20.4	NA	NA	NA	NA	NA
Health Services Admin <sup>1</sup>	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0	80.0
Dept of Housing & Urban Dvlpmt	19.3	27.8	25.1	23.6	39.6	41.8	33.1	33.5	28.0	59.4	50.6
Dept of the Interior, total	508.5 2.8 99.3 5.8 308.4	592.9 8.8 106.1 8.7 356.6	609.2 6.3 107.1 13.2 361.4	619.1 8.9 111.9 10.3 356.7	694.1 .0 107.9 7.4 371.1	561.6 .0 .0 8.0 362.0	.0 NA 6.5	579.9 .0 NA 7.1 526.3	532.0 .0 NA 8.8 464.1	564.1 .0 NA 8.1 497.2	584.6 .0 NA 9.9 514.3
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	1.9 NA 20.1 .2	2.7 NA 27.5 .6	3.8 NA 31.1 .9	5.8 .0 38.1 .4	20.6 162.8 24.2 .1	20.0 151.8 19.7	21.9 NA 20.2 .0	20.6 NA 26.0 .0	29.3 NA 29.7 .0	29.1 NA 29.7 .0	28.6 NA 31.8 .0
Reclamation & Enforcement US Fish & Wildlife Service	.7 69.4	1.0 81.0	.3 85.1	.5 86.5	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Justice, total	40.5 4.5 2.4 8.2	48.9 5.2 2.7 10.8	48.0 5.9 1.4 10.9	48.9 6.1 .9 11.3	45.0 5.4 .9 7.0	57.9 5.7 .4 10.9	77.3 5.2 1.2 33.5	84.7 4.6 - 35.5	100.6 8.1 .0 35.8	110.2 7.8 .0 36.2	81.8 8.0 .0 36.2
ServiceOffice of Justice Programs	.4 25.0	.4 29.8	.4 29.4	.4 30.2	.4 31.4	.4 40.5	.2 37.2	.4 44.2	.0 56.7	.5 65.7	.5 37.1
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Occupational Safety & Health Administration	73.0 7.3 .1 53.4 2.5	44.0 7.5 .0 22.1 2.6	51.7 7.6 .0 31.7	55.0 6.9 .0 35.9	59.7 7.1 .0 40.0	55.4 14.8 .0 25.6	13.3 .0 26.9	35.1 12.6 .0 14.1 5.5	27.8 12.4 .0 7.2 4.6	26.7 12.4 .0 6.6	25.9 12.4 .0 4.4 5.3
	7.1		5.9		5.3				.2	.2	
Office of the SecretaryPension Benefit Guaranty Corp Pension & Welfare Benefits	.5	8.7 .5	.9	5.8 1.3	1.3	6.3	.7	.2 .7	.6	.7	.2 .7
Administration	2.1	2.5	2.6	2.6	2.7	3.6		2.0	2.7	1.8	3.0
Department of State <sup>2</sup>	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	.9	1.0	1.0

## Table C-96a. Federal obligations for research and development, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 3 of 4
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Dept of Transportation, total	366.6 20.2 216.1 91.5 10.2	379.9 25.5 220.1 86.9 15.9	445.0 20.1 236.2 130.2 22.7	545.3 32.9 248.9 174.9 25.2	620.7 22.3 285.6 235.7 19.5	727.0 19.7 288.4 312.5 26.5	552.5 20.0 208.3 240.0 26.7	526.9 22.9 209.1 210.3 18.9	566.1 20.4 228.0 227.3 21.5	702.1 18.0 211.3 355.6 25.4	929.8 22.7 233.7 559.7 23.9
Federal Transit Admin Maritime Administration National Highway Traffic	1.6 .9	1.7 1.7	1.7 1.8	24.3 1.7	19.9 1.7	28.7 2.5	13.7 .0	17.0 .0	17.6 .0	22.2 .0	19.2 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 6.8	21.4 4.3	25.8 4.1	31.6 4.5	25.3 5.4	39.7 3.9	33.2 2.8	36.4 3.5	41.6 3.4	50.4 9.6	58.7 4.5
Administration	2.4	2.4	2.5	1.3	5.3	5.0	7.7	8.7	6.3	9.7	7.5
Dept of the Treasury, total	25.6	30.8	24.6	16.6	19.0	61.4	60.0	59.7	65.1	72.0	86.3
Bureau of Engraving & Printing	2.1	3.5	2.0	3.2	1.7	1.8	1.7	1.7	2.8	2.4	2.4
Financial Crimes Enforcement Network Internal Revenue Service Off of Thrift Supervision	.0 16.8 .0	2.3 17.9 3.0	1.2 17.9 .8	1.5 6.5 .7	.0 11.3 .5	.0 49.7 .6	.0 51.2 .5	.0 50.8 .6	.0 52.0 .7	.0 58.8 .8	.0 73.7 .9
US Customs Service United States Mint United States Secret Service	6.2 .1 .5	3.7 .1 .4	2.2 .0 .5	4.0 .1 .6	4.5 .5 .5	8.5 .3 .5	6.2 .0 .5	6.1 - .4	9.0 .1 .5	8.8 .7 .5	8.3 .5 .6
Department of Veterans Affairs	237.7	216.6	223.9	236.2	248.0	237.9	256.1	252.7	277.1	320.5	316.0
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.5 .4 1.1 419.7 1.3	1.7 .7 1.3 432.6 1.4	1.7 1.9 1.1 483.9 1.6	2.1 .9 1.2 495.3 1.6	1.4 .9 .3 553.5 1.7	1.4 .9 .4 551.5 2.3	NA .9 - 464.3 2.8	NA .9 .1 492.2 3.1	NA .7 .0 571.2 3.0	NA .7 .1 555.9 4.2	NA .8 1.3 534.9 2.7
Federal Trade Commission	.5 .7	1.0 .0	1.3 .0	.9 .0	.7 .0	.6 .0	.5 .0	.7 .0	1.1 .0	1.1 .0	1.4 .0
Cooperation Agency, total	334.6	377.7	365.9	382.2	254.3	302.5	223.0	206.4	212.0	209.3	194.1
Development <sup>3</sup>	334.6 8.4	377.7 9.0	365.9 10.3	382.2 10.5	254.3 10.0	302.5 10.2	223.0 10.6	206.4 2.4	212.0 1.5	209.3 2.1	194.1 1.8
Nat'l Aero & Space Admin	6,533.2 .4 1,689.5 108.8 4.1	7,280.2 .7 1,785.2 108.8 NA	7,657.6 .7 1,868.4 119.0 NA	8,019.9 .3 1,881.9 119.8 NA	8,296.2 .3 2,040.4 90.7 NA	9,014.9 .1 2,149.3 88.2 NA	8,570.1 .1 2,188.3 70.9 NA	9,327.3 .1 2,248.5 62.1 NA	9,568.0 .1 2,289.3 51.7 NA	9,308.0 .1 2,512.9 49.2 NA	9,370.3 .1 2,698.3 46.6 NA
Smithsonian Institution Social Security Admin Tennessee Valley Authority	84.0 NA 64.9	98.0 NA 68.3	98.0 NA 97.3	102.0 NA 108.6	124.2 NA 97.9	124.0 NA 93.1	127.0 11.5 6.1	130.0 13.6 8.9	120.0 17.4 2.7	122.0 53.7 .0	129.0 36.9 .0

#### Table C-96a. Federal obligations for research and development, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
United States Arms Control & Disarmament Agency <sup>2</sup> US Information Agency US Internat'l Trade Comm	0.2 .5 9.1	0.4 .1 9.9	2.1 .0 12.3	1.5 1.1 12.2	1.3 .6 9.4	1.1 .3 12.2	0.7 .1 3.2	1.2 .2 5.7	1.2 .3 7.2	0.1 .1 6.9	.0 0.1 7.1

- Data for fiscal years 1998-2000 from the Substance Abuse & Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.
- Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of
- Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-96). More accurate data for AID will be reported in future volumes of this survey.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-97. Federal obligations for R&D plant, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	ige 1 of 2
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	1,475.5	1,555.7	1,485.7	1,389.8	1,297.5	1,787.3	1,820.8	1,538.8	1,846.0	2,057.1	2,165.1
Departments:											
Dept of Agriculture, total Agricultural Research Svc Animal & Plant Health	22.6 NA	56.9 NA	20.8 17.6	21.5 21.1	33.9 23.4	39.2 28.8	40.6 29.0	79.4 69.2	111.8 43.9	135.2 55.5	89.2 55.2
Inspection Service	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.3
Ed, & Extension Service Forest Service	NA 3.5	NA 3.6	.0 3.2	.0 .4	10.0 .5	10.0 .4	10.0 1.6	9.5 .6	67.6 .3	76.2 2.9	32.2 1.6
Science & Ed Admin, total Agricultural Research Svc	19.1 19.1	53.2 53.2	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Department of Commerce, total Maritime Administration	2.4 .9	4.6 .5	1.3 NA	1.0 NA	.7 NA	9.4 NA	4.2 NA	9.3 NA	5.2 NA	11.2 NA	9.1 NA
National Institute of Standards & Technology	1.5	.3	.5	1.0	.7	9.4	4.2	7.7	2.0	10.7	8.6
National Oceanic & Atmospheric Administration	.0	3.9	.8	.0	.0	.0	.0	1.5	3.2	.5	.5
Department of Defense, total  Department of the Air Force Department of the Army Department of the Navy Defense Agencies	270.2 167.5 3.8 68.1 30.8	208.2 108.0 13.8 83.2 3.2	277.7 159.6 12.8 97.9 7.4	290.5 84.7 24.7 155.9 25.2	312.5 138.7 26.3 141.7 5.8	529.2 285.4 56.2 173.4 14.2	530.9 291.3 52.9 182.1 4.6	286.1 130.1 53.9 97.6 4.5	477.2 270.3 65.8 69.0 72.1	435.8 143.7 92.8 74.9 124.4	499.3 250.2 45.1 89.6 114.4
Department of Education	.0	.0	.0	.0	.0	.0	1.1	6.6	21.0	5.2	1.9
Department of Energy	844.4	1,024.1	978.2	914.0	757.7	852.4	868.4	742.3	772.2	915.0	873.0
Department of Health & Human Services, total	53.5	30.6	23.7	24.7	47.9	31.1	42.1	37.9	36.7	19.5	78.6
Alcohol, Drug Abuse, & Mental Health Administration Food & Drug Administration National Insts of Health	.1 5.8 47.6	.0 1.2 29.4	.2 1.2 22.3	3.3 2.0 19.4	1.8 28.5 17.5	.3 3.0 27.8	.4 13.0 28.8	.5 8.0 29.4	.6 .8 35.3	.0 .5 19.0	.0 23.0 55.6
Dept of the Interior, total	5.0 .0 .3 .0	7.5 .0 1.0 .0	3.5 .3 .6 .0	1.3 NA .1 .0	2.4 NA .1 1.4	5.2 NA - 1.0	4.2 NA .0 .8	4.3 NA .0 .8	11.8 NA .0 .8	9.4 NA .0 .8	10.8 NA 2.6 1.3
Reclamation & Enforcement	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
Office of Water Rsch & Tech US Fish & Wildlife Service	.7 4.0	.7 5.5	.8 1.8	.9 .3	.0 .9	.0 4.2	NA 3.4	NA 3.5	NA 11.0	NA 8.6	NA 6.9
Department of Justice, totalFed Bureau of Investigation	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	11.1 11.1	.0 .0	.0 .0
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin National Highway Traffic	22.6 .0 9.9 .6 11.9	23.3 .0 5.7 7.2 10.2	18.9 .0 8.9 - 9.5	11.9 .0 5.1 .0 6.3	21.9 .0 21.4 .0	16.9 .0 16.4 .0	9.0 .0 8.5 .0	12.1 .0 10.9 .7	11.2 .0 10.4 .3 .0	13.9 .3 13.2 .0 .4	15.5 .0 15.5 .0
Safety Administration	.2	.2	.5	.5	.5	.5	.5	.5	.5	.0	.0
Dept of the Treasury, totalUS Customs Service	- - NA	- - .0	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .1	.1 .1 -	.1 .1 -	.1 .1 -
Department of Veterans Affairs	5.1	4.4	14.8	2.8	10.5	6.1	3.3	4.8	5.9	19.5	11.0
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#### Table C-97. Federal obligations for R&D plant, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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											U
Agency and subdivision	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other agencies:											
Consumer Product Safety Comm Environmental Protection Agcy General Services Admin International Development	2.7 2.4 .0	2.7 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0	.0 .0 18.8	.0 .0 .0	.0 .0 .0	.0 .0 .0
Cooperation Agency, total	6.4 6.4	6.3 6.3	8.0 8.0	6.0 6.0	4.8 4.8	7.8 7.8	6.9 6.9	7.5 7.5	6.8 6.8	6.1 6.1	.0 .0
Nat'l Aero & Space Admin National Science Foundation Nuclear Regulatory Commission Smithsonian Institution Tennessee Valley Authority United States Arms Control & Disarmament Agency	147.5 30.2 8.6 1.0 50.8	159.1 18.7 7.7 .9 .6	115.8 14.6 7.7 .4 .4	113.7 1.5 .0 .5 .3	100.8 3.2 .0 1.0 .3	244.2 45.2 .0 .2 .2	234.3 73.6 .0 1.6 .5	275.0 53.2 .0 .7 .8	309.4 61.3 .0 2.9 .3	56.9 .0 .7	519.5 53.6 .0 3.4 .2
Disarmament Agency	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0

Because of rounding, detail may not add to totals. NOTES:

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-97a. Federal obligations for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										1 6	ige i oi z
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Total, all agencies	2,271.7	2,852.8	2,984.6	3,100.7	2,215.4	2,256.1	1,746.1	1,926.7	1,840.2	2,298.8	2,081.2
Departments:											
Dept of Agriculture, total Agricultural Research Svc Animal & Plant Health	102.2 44.4	144.6 64.7	164.7 98.1	142.4 78.3	125.7 78.3	143.4 67.7	128.4 67.9	184.2 118.9	89.8 86.3	120.8 115.8	111.2 106.2
Inspection Service	6.1	.0	.0	.0	.0	.0	1.5	.0	.0	.0	.0
Ed, & Extension Service Forest Service	46.9 4.9	61.5 18.4	63.0 3.6	60.5 3.6	42.6 4.9	71.3 4.3	56.5 2.5	63.2 2.0	.9 2.6	.0 5.0	.0 5.0
Department of Commerce, total National Institute of	15.4	15.7	21.0	25.4	31.2	77.7	84.5	43.4	48.3	152.4	136.6
Standards & Technology	8.8	8.5	11.2	12.6	30.9	77.2	84.5	21.8	21.4	139.0	106.8
National Oceanic & Atmospheric Administration	6.6	7.3	9.9	12.8	.3	.5	.0	21.6	26.9	13.4	29.8
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies	487.3 322.2 53.1 60.4 51.6	425.7 152.3 91.0 54.0 128.4	396.5 179.7 22.0 96.0 98.8	371.5 231.6 18.1 45.5 76.3	265.7 99.3 2.1 76.1 88.2	60.5 37.8 5.5 11.3 5.9	46.8 24.4 6.2 8.0 8.3	85.5 39.1 4.1 37.0 5.3	65.8 26.2 3.9 34.6 1.1	108.4 47.2 4.1 35.8 21.4	33.4 22.1 .2 11.1 .0
Department of Education	8.9	4.2	2.4	2.2	1.8	1.8	.0	.0	.0	.0	.0
Department of Energy	916.0	1,220.1	1,320.8	1,461.5	911.8	745.1	705.9	729.3	727.1	848.2	940.2
Department of Health & Human Services, total Food & Drug Administration Hith Resources & Svcs Admin National Insts of Health Social Security Admin	107.8 23.0 .0 84.8 .0	86.3 18.4 .0 67.8	96.7 14.3 .3 82.1 .0	149.3 19.7 1.4 128.2 .0	120.2 8.4 1.4 110.5 .0	255.7 5.3 1.6 248.8 .0	133.1 5.5 .7 126.9 NA	260.1 14.5 .7 244.9 NA	286.3 28.1 .9 257.3 NA	379.6 11.4 .9 367.4 NA	213.9 31.8 .8 181.4 NA
Dept of the Interior, total Bureau of Mines Geological Survey Minerals Management Service Nat'l Biological Svc US Fish & Wildlife Service	14.0 3.0 1.3 .2 NA 9.5	22.2 2.1 3.3 .3 NA 16.6	18.4 .0 4.3 1.0 NA 13.1	23.1 .0 3.8 1.1 .0 18.3	9.0 .0 6.4 1.2 1.4	6.7 .0 5.4 1.0 .3	1.9 NA 1.2 .8 NA .0	7.2 NA 5.0 2.2 NA .0	1.5 NA .0 1.5 NA .0	1.1 NA .0 1.1 NA .0	1.1 NA .0 1.1 NA .0
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin Federal Transit Admin	21.8 .4 21.4 .0 .0	18.4 .4 16.3 .0 1.7	25.3 .4 24.0 .8 .1	32.3 .5 22.4 .9 1.6 7.0	40.9 .5 33.0 6.3 1.1	28.8 .5 21.7 3.0 3.5 .0	31.8 .5 20.6 7.3 3.4 .0	19.0 .3 17.2 .9 .6	17.6 .3 14.3 2.0 1.1	15.4 .3 14.3 - .8 .0	13.6 .3 12.8 - .5
Dept of the Treasury, total	.1 .1 -	.1 .1 -	.1 .1 -	.2 .1 -	.2 .1 -	.2 .1 -	.2 .1 -	.1 .1 .0	.1 .1 .0	.1 .1 .0	.1 .1 .0
Department of Veterans Affairs	3.3	3.4	5.7	3.4	11.7	7.2	3.8	31.3	.4	.3	1.0

#### Table C-97a. Federal obligations for R&D plant, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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											-go _ o
Agency and subdivision	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Other agencies:  Environmental Protection Agcy General Services Admin Nat'l Aero & Space Admin National Science Foundation Smithsonian Institution Tennessee Valley Authority	.0 18.8 527.0 39.3 4.8 4.9	.0 22.6 723.6 159.6 1.5 4.8	.0 6.5 817.8 101.6 3.8 3.2	2.5 1.0 749.4 130.4 5.0 1.0	4.8 .3 515.3 171.9 5.0	4.8 5.1 624.8 289.6 5.0	.0 .1 417.4 187.2 5.0	25.0 - 333.8 203.8 4.0 .0	66.0 .0 350.0 184.3 3.0	106.0 - 361.4 201.1 4.0 .0	110.0 .0 324.9 191.2 4.0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-98. Federal obligations for research, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1	20,765.5
Departments:											
Dept of Agriculture, total	631.9 NA .4 NA	657.4 1.6 1.0 NA	741.0 1.7 .9 367.9	766.5 1.7 1.0 379.1	817.6 2.1 1.1 417.9	834.9 2.2 1.2 424.3	910.9 2.9 1.3 442.0	896.4 2.6 1.3 436.0	918.9 2.7 1.2 454.6	985.2 2.7 1.3 479.4	1,002.2 2.8 1.3 492.1
Inspection Service	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6	7.4
Cooperative State Research, Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc Economics & Statistics Svc Forest Service	NA NA 35.5 NA 102.5	NA NA NA 31.1 106.1	199.4 39.3 NA NA 119.9	219.0 39.3 NA NA 107.7	232.3 38.8 NA NA 103.9	235.7 43.7 NA NA 105.1	284.3 46.4 NA NA 109.8	269.0 44.6 NA NA 109.7	270.7 44.8 NA NA 122.9	298.4 48.1 NA NA 131.5	307.3 49.5 NA NA 127.5
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.0 NA NA	.0 NA NA	.0 .0 7.5	.0 8.5 7.0	.0 8.2 7.6	.0 6.0 8.2	.8 6.7 8.4	.6 12.8 8.0	.7 6.8 3.4	.6 8.2 3.6	.8 8.4 2.9
Cooperation & Development Office of Transportation	.0 .0	4.9 .0	3.6 .8	2.4 .8	4.8 .8	7.5 .9	7.3 1.1	6.6 .9	5.3 .9	4.8 .9	2.3 NA
Science & Ed Admin, total Agricultural Research Svc Cooperative State Rsch Svc	493.5 320.9 172.6	512.8 328.6 184.2	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	219.5 1.8 8.5 12.2	254.4 1.9 2.5 12.1	249.4 3.0 1.8 NA	276.1 1.9 1.6 NA	284.8 2.2 5.3 NA	296.7 2.4 5.1 NA	324.2 2.5 2.0 NA	339.5 2.6 2.3 NA	338.6 2.8 5.0 NA	342.3 3.8 4.2 NA	351.0 3.0 1.0 NA
Standards & Technology	51.8	58.9	66.2	73.9	81.5	83.7	86.5	89.1	89.4	98.9	105.6
National Oceanic & Atmospheric Administration National Telecommunications &	142.7	168.8	168.5	188.5	188.9	197.7	224.4	237.5	234.4	228.2	234.6
Information Administration Office of the Secretary	2.4 .1	9.6 .5	9.9 .0	10.1	6.9	7.7	7.9 .9	7.6 .3	7.0	7.3 .0	6.9 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	2,014.1 492.3 448.6 567.3 505.9	2,261.8 537.3 479.3 611.1 634.1	2,600.9 617.3 536.5 698.0 749.1	2,952.8 633.9 639.2 778.7 901.0	3,222.6 688.4 693.6 827.0 1,013.6	3,048.5 740.1 708.8 765.4 834.3	3,168.3 736.7 823.4 791.3 816.9	3,227.3 759.0 827.3 784.3 856.7	3,347.6 784.8 909.9 786.7 866.1	3,239.1 773.1 753.7 747.8 964.5	3,656.1 807.4 823.4 783.2 1,242.1
Department of Education	93.4	87.6	53.8	70.5	76.1	80.9	91.9	95.8	106.9	111.0	122.0
Department of Energy	1,131.8	1,277.3	1,413.6	1,696.1	1,961.1	2,024.9	2,141.0	2,040.3	2,097.9	2,235.4	2,431.7

# Table C-98. Federal obligations for research, by agency: fiscal years 1979-1989

### [Dollars in millions]

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											age 2 of 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total Alcohol, Drug Abuse, & Mental Health Administration Centers for Disease Control &	3,015.7 213.5	3,332.8 233.5	3,492.2 237.7	3,605.6 246.1	4,020.8 300.4	4,466.0 336.0	5,028.3 376.4	5,189.6 394.9	6,021.9 473.3	6,497.0 552.4	7,088.4 692.6
Prevention	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7	117.8
	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0	99.0
	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2	49.1
Health Resources Admin	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	6.7	11.0	16.2	18.2	12.3	9.3	10.0	10.5
	10.2	8.0	10.2	NA	NA	NA	NA	NA	NA	NA	NA
	14.9	19.1	39.9	8.7	6.9	4.5	5.8	6.8	9.4	7.1	8.5
	2,530.1	2,787.5	2,948.3	3,124.5	3,478.2	3,910.4	4,428.1	4,587.6	5,314.7	5,680.7	6,061.8
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	29.9	25.7	28.8	13.9	16.6	18.1	16.9	15.8	18.9	19.4	25.6
	24.7	24.0	19.5	13.1	14.4	10.0	9.4	6.1	8.2	4.7	7.8
	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7	15.8
Dept of Housing & Urban Dvlpmt	23.8	19.6	16.7	10.3	11.3	6.3	6.5	5.3	5.5	6.3	6.1
Dept of the Interior, total  Bonneville Power Admin  Bureau of Land Management  Bureau of Mines  Bureau of Reclamation	339.5	354.4	369.8	351.5	357.7	380.2	369.3	367.9	382.1	392.5	441.9
	.0	.0	6.5	NA	NA	NA	NA	NA	NA	NA	NA
	1.1	1.3	1.5	2.4	2.0	1.8	2.8	2.1	2.1	2.2	2.0
	79.1	82.8	68.0	81.1	79.4	97.2	86.5	81.6	85.2	86.2	93.2
	11.4	12.9	13.4	9.0	8.8	9.0	11.2	9.7	10.2	3.7	3.5
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining Reclamation & Enforcement	145.1 NA 8.9 1.4	145.8 NA 8.2 2.2 7.5	169.3 NA 10.4 1.5	152.1 .0 11.2 .5	154.7 1.5 13.7 7.4	204.0 1.5 14.0 .1	210.5 1.4 15.0 1.9	211.2 1.1 17.3 1.0	216.5 1.0 18.5 .0	225.3 1.2 19.4 .1	266.9 2.2 19.4 .0
Office of Water Rsch & Tech	17.8	18.4	15.8	10.1	1.2	3.6	NA	NA	NA	NA	NA
US Fish & Wildlife Service	69.6	75.2	77.8	83.6	87.5	48.3	37.9	41.7	47.6	53.5	53.9
Department of Justice, total Bureau of Prisons Drug Enforcement Admin Immigration & Naturalization	28.8	28.8	19.5	16.3	20.7	17.9	19.3	22.3	19.8	17.4	17.5
	.5	.9	1.7	.9	1.3	1.2	1.1	2.7	2.2	2.1	2.1
	.7	.8	.4	1.3	.9	.7	.5	.8	.7	.6	.5
Service Office of Justice Programs Office of Legal Policy	.1	.2	.1	.3	.3	.3	.2	.2	.2	.3	.1
	25.9	25.6	16.7	13.4	18.0	15.7	17.2	18.5	16.7	14.4	14.8
	1.6	1.3	.7	.4	.2	.0	.3	.2	.1	.0	.0
Department of Labor, total Bureau of Labor Statistics Employment Standards Admin Employment & Training Admin Labor-Management Relations &	42.1	36.4	58.2	17.2	17.9	16.3	12.4	9.5	20.4	26.7	22.2
	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0	7.0
	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1	.1
	25.9	20.1	48.8	8.7	7.9	6.1	3.5	3.5	5.4	6.8	6.1
Cooperative Programs	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
Labor-Management Services Administration Occupational Safety & Health	3.2	2.8	1.8	.7	.9	NA	NA	NA	NA	NA	NA
Administration Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2	4.5
	1.6	1.4	1.1	.9	1.5	1.9	1.7	1.3	1.8	5.2	2.5
	NA	NA	.1	.3	.3	.3	.2	.1	.3	.3	.3
Administration	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7	1.4
Department of State, total Departmental Funds	2.7	2.0	1.6	1.5	1.5	1.6	1.5	1.5	3.0	4.2	4.7
	2.7	2.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

#### Table C-98. Federal obligations for research, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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											ige 3 or 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	67.0 10.9 7.5 4.4 7.5	82.4 8.1 8.2 4.6 7.9	88.6 15.0 8.2 5.1 6.2	66.7 1.7 7.0 5.3 3.1	72.6 1.2 12.5 7.3 2.8	77.7 7.2 15.0 6.1 12.3	71.2 5.4 17.3 6.3 11.4	68.2 3.5 14.0 14.7 12.5	68.8 3.7 11.1 20.7 10.4	91.2 5.4 13.3 43.7 8.2	120.5 4.6 23.6 56.6 7.5
Federal Transit Admin Maritime Administration	1.1 NA	8.9 NA	9.3 9.5	19.4 6.6	18.3 6.2	1.0 8.6	.5 8.0	.0 6.8	.0 3.3	.0 .5	.0 .0
National Highway Traffic Safety Administration Office of the Secretary	30.0 .6	38.6 .6	29.4 .7	21.3 .3	21.4 .3	24.7 .9	20.9 .9	16.1 .4	18.9 .4	19.1 .7	26.2 1.3
Research & Special Programs Administration	5.0	5.5	5.2	2.1	2.6	1.8	.5	.3	.2	.4	.7
Dept of the Treasury, total	4.7	5.7	5.2	8.1	10.2	10.6	18.3	17.7	17.4	15.9	16.3
Bureau of Alcohol, Tobacco, & Firearms Bureau of Engraving &	.7	.3	.1	NA	NA	NA	NA	NA	NA	NA	NA
Printing	.6 3.5 .0 NA	1.3 3.9 .1 .0	.9 4.2 .1 .0	2.8 5.3 - .0	2.0 7.9 .0 .3	2.2 8.1 .1	3.4 14.7 .1 .2	3.1 14.0 .2 .4	2.8 14.1 .2 .2	1.2 13.7 .7 .4	1.4 14.1 .4 .4
Department of Veterans Affairs	111.4	117.9	127.7	123.0	146.1	171.9	209.1	169.9	190.3	196.1	213.7
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Community Services Admin Consumer Product Safety Comm Environmental Protection Agcy	1.7 .7 1.8 1.8 259.0	2.2 .6 1.3 1.6 245.1	2.2 .3 1.9 .2 218.3	2.0 .3 NA .1 243.4	2.1 .2 NA .3 174.6	2.1 .4 NA 1.1 172.0	2.4 .2 NA 1.4 214.6	2.1 .2 NA 1.1 217.8	1.9 .1 NA .6 277.2	1.8 .2 NA .1 267.9	1.1 .8 NA .5 273.3
Fed Communications Commission	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2	1.1
Federal Emergency Management Agency, total Federal Trade Commission General Services Admin International Development	9.7 1.5 .2	9.3 3.0 .1	9.1 1.1 .4	9.2 1.2 .5	3.3 1.4 .2	6.1 1.6 .4	2.9 1.7 .4	.0 1.8 .9	.0 .5 1.6	.0 .4 2.3	.0 .4 .5
Cooperation Agency, total	66.9	79.7	86.4	127.9	156.7	167.0	159.8	184.9	154.0	135.1	219.1
Agcy for Internat'l Dvlpmt	66.9 .2 .6 1,451.2	79.7 .1 .6 1,609.6	86.4 .0 .9 1,407.2	127.9 .0 .9 1,407.1	156.7 .0 1.3 1,544.8	167.0 .0 2.1 1,709.2	159.8 .0 2.1 1,783.6	184.9 .0 1.6 2,069.0	154.0 .0 1.5 2,269.2	135.1 .0 1.6 2,331.6	219.1 .0 1.6 2,878.8
Administration	NA	NA	NA	NA	NA	NA	.2	.0	.7	.5	.2
National Science Foundation  Nuclear Regulatory Commission  Office of Personnel Management  Office of Thrift Supervision  Smithsonian Institution	800.0 148.8 1.4 .9 36.9	873.7 182.7 2.6 1.2 41.0	955.5 219.7 3.4 1.0 44.9	973.2 220.3 .0 2.7 52.4	1,062.0 207.3 .0 3.0 56.0	1,202.8 190.7 .0 2.6 63.6	1,345.6 150.0 .0 2.8 71.1	1,353.3 123.8 .0 3.3 63.3	1,470.5 122.5 .0 3.4 71.5	1,532.8 108.5 .0 3.4 75.1	1,670.4 114.8 .0 4.1 80.2
Tennessee Valley AuthorityUnited States Arms Control &	16.5	15.8	14.2	12.7	12.3	14.3	14.4	17.8	17.7	18.5	14.6
Disarmant AgencyUS Information Agency US Internat'l Trade Comm	2.7 .1 3.4	3.0 .1 2.1	1.6 1.1 3.4	1.3 .0 3.8	.8 - 4.7	1.2 1.4 5.0	1.1 .1 5.8	.9 1.6 6.9	.4 .0 7.2	.8 .1 8.1	1.2 .0 8.7

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-98a. Federal obligations for research, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Selented agency											Pa	age 1 of 3
Departments:	Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
Depart Marketing State											1999	2000
Dept of Agricultural Cooperative Svc	Total, all agencies	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.3	30,922.3	33,821.7	34,679.6
Agricultural Cooperative Svc	Departments:											
Economic Research Service	Agricultural Cooperative Svc Agricultural Marketing Svc Agricultural Research Svc Cooperative State Research,	2.7 2.2 512.3	2.8 3.7 550.8	3.4 4.1 583.2	2.9 4.1 574.3	3.7 4.2 624.4	NA 4.2 628.6	NA 4.2 621.2	NA 4.2 625.7	NA 4.0 689.7	NA 4.0 757.9	NA 4.3 778.8
Food Safety Inspection Svc	Ed, & Extension Service	324.2	376.8	418.2	418.6	429.0	417.7	362.4	433.5	386.4	506.2	451.0
Human Nutrition Info Svc	Food Safety Inspection Svc Foreign Agricultural Svc Forest Service	.0 .0 153.8	.0 .0 170.2	.0 .0 175.8	.0 .0 177.2	.0 1.1 189.8	.0 .9 187.7	.0 1.3 172.3	.0 1.4	.1 1.4	.1 1.4	.1 1.4 174.5
Nati   Agri Statistics Svc	Stockyards Administration	.2	.7	1.5	1.8	1.8	.3	.5	.6	.5	.5	.7
Cooperation & Development   3.4   3.0   1.5   1.5   2.0   NA   NA   NA   NA   NA   NA   NA   N	Nat'l Agri Statistics Svc											
Bureau of the Census	Cooperation & Development											
Standards & Technology	Bureau of the Census Economic Development Admin	4.9	4.8	3.4	3.3	2.8	2.9	2.5	3.4	5.2	9.9	5.0
National Telecommunications & Information   1962	Standards & Technology	111.8	124.3	149.4	172.9	207.3	372.1	354.8	331.5	305.4	330.4	339.6
Information Administration		252.4	315.6	438.7	401.7	502.7	510.4	480.8	468.8	492.1	537.3	508.4
Department of the Air Force   776.3   830.4   790.5   887.8   814.3   834.5   832.3   816.6   736.9   752.6   723.4	Information Administration						6.4	11.9				
Department of Energy	Department of the Air Force  Department of the Army  Department of the Navy	776.3 780.2 807.6	830.4 860.5 874.0	790.5 932.7 892.8	887.8 1,018.6 996.1	814.3 852.6 847.1	834.5 852.1 880.0	882.3 670.4 893.5	816.6 710.0 885.7	736.9 817.8 822.2	752.6 878.2 895.6	723.4 771.8 902.3
Department of Health & Human   Services, total   T,467.1   8,162.5   T,945.5   9,192.6   9,736.4   10,076.0   10,545.9   11,228.1   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2   12,018.5   13,697.1   14,100.2	Department of Education	130.3	131.7	127.0	133.6	136.8	138.4	135.5	138.1	148.7	153.9	172.9
Services, total         7,467.1         8,162.5         7,945.5         9,192.6         9,736.4         10,076.0         10,545.9         11,228.1         12,018.5         13,697.1         14,100.2           Administration on Aging         NA         2.9         2.5         2.7         3.5         3.0         2         2         2.4         1.2         1.1           Administration for Children         & Families         NA         13.5         34.3         18.5         10.4         11.2         12.6         17.4         23.5         18.8         28.0           Agency for Health Care Policy & Research         44.2         93.0         97.8         105.6         142.0         124.0         116.0         134.1         138.8         160.9         197.3           Alcohol, Drug Abuse, & Mental Health Administration         801.2         923.0         NA	Department of Energy	2,570.5	3,273.6	3,412.5	3,440.2	3,282.5	3,459.9	3,362.2	3,567.7	3,787.5	4,130.1	4,373.2
& Families         NA         13.5         34.3         18.5         10.4         11.2         12.6         17.4         23.5         18.8         28.0           Agency for Health Care Policy & Research         44.2         93.0         97.8         105.6         142.0         124.0         116.0         134.1         138.8         160.9         197.3           Alcohol, Drug Abuse, & Mental Health Administration         801.2         923.0         NA	Services, total											
& Research         44.2         93.0         97.8         105.6         142.0         124.0         116.0         134.1         138.8         160.9         197.3           Alcohol, Drug Abuse, & Mental Health Administration         801.2         923.0         NA		NA	13.5	34.3	18.5	10.4	11.2	12.6	17.4	23.5	18.8	28.0
Health Administration   801.2   923.0   NA   NA   NA   NA   NA   NA   NA   N	& Research	44.2	93.0	97.8	105.6	142.0	124.0	116.0	134.1	138.8	160.9	197.3
Prevention         95.6         113.4         146.9         162.5         206.8         317.4         296.7         323.0         343.6         382.6         468.6           Food & Drug Administration         99.0         125.0         135.7         154.5         169.4         170.5         170.8         158.6         142.9         141.2         151.7           Health Care Financing Admin         49.1         69.1         75.5         68.2         80.0         74.5         52.7         43.6         51.2         50.0         55.0           Hlth Resources & Svcs Admin         11.9         11.0         10.1         9.6         10.6         12.2         11.1         13.1         12.9         13.0         13.1           Human Development Services         7.7         NA		801.2	923.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Office of the Assistant Secretary for Health	Prevention Food & Drug Administration Health Care Financing Admin HIth Resources & Svcs Admin	99.0 49.1 11.9	125.0 69.1 11.0	135.7 75.5 10.1	154.5 68.2 9.6	169.4 80.0 10.6	170.5 74.5 12.2	170.8 52.7 11.1	158.6 43.6 13.1	142.9 51.2 12.9	141.2 50.0 13.0	151.7 55.0 13.1
Secretary for Health         5.8         9.6         6.0         .0         .0         .0         NA         NA         NA         NA         NA           Office of the Secretary, total Office of the Assistant Sec, Planning & Eval         NA		6,335.8	6,783.0	7,398.7	8,638.5	9,079.7	9,333.6	9,876.9	10,519.7	11,289.2	12,915.5	13,171.5
Sec, Planning & Eval	Secretary for Health Office of the Secretary, total											
	Sec, Planning & Eval											

## Table C-98a. Federal obligations for research, by agency: fiscal years 1990-2000

### [Dollars in millions]

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										Pa	age 2 of 3
Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Dept of Housing & Urban Dvlpmt	6.6	9.4	8.8	8.1	13.7	14.2	11.2	11.3	9.2	21.3	18.1
Dept of the Interior, total Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	475.2 2.1 89.9 5.3 293.2	553.4 5.9 99.0 7.8 338.4	570.6 5.9 102.9 10.7 344.5	580.1 8.0 105.0 7.4 343.9	650.2 .0 95.4 5.5 355.4	532.4 .0 .0 6.0 347.9	4.9	552.7 .0 NA 5.4 500.7	502.9 .0 NA 6.6 437.2	534.0 .0 NA 6.1 469.1	552.1 .0 NA 7.4 484.2
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	1.9 NA 20.1 .0	2.7 NA 27.5 .1	3.8 NA 31.1 .2	5.8 .0 38.1 .2	20.6 149.0 24.2 .0	20.0 138.8 19.7 .0	21.9 NA 20.2 .0	20.6 NA 26.0 .0	29.3 NA 29.7 .0	29.1 NA 29.7 .0	28.6 NA 31.8 .0
Reclamation & Enforcement US Fish & Wildlife Service	.7 62.0	1.0 71.0	.3 71.2	.5 71.2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Justice, total	19.9 1.8 .4	21.1 1.9 .9	20.3 2.5 .1	25.6 2.5	25.9 2.1 .1	25.8 3.2 .0	32.0 3.1	32.5 1.9	42.0 4.3 .0	49.5 4.0 .0	25.0 4.0 .0
ServiceOffice of Justice Programs	.4 17.3	.4 17.9	.4 17.3	.4 22.7	.4 23.3	.4 22.2	.2 28.7	.4 30.2	.0 37.7	.0 45.6	.0 21.0
Department of Labor, total	21.6 7.3 .1 6.0	24.3 7.5 .0 6.6	23.8 7.6 .0 5.6	19.0 6.9 .0 3.5	19.6 7.1 .0 3.1	29.9 14.8 .0 4.2	26.7 13.3 .0 2.6	21.7 12.6 .0 1.5	22.1 12.4 .0 2.2	21.4 12.4 .0 2.0	22.1 12.4 .0 1.3
Administration	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.6	5.0	5.3
Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	3.3 .3	4.7 .4	4.1 .8	2.9 .7	3.1 .3	2.9 .1	1.8 .1	.1 .1	.1 .1	.1 .1	.1 .1
Administration	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.7	1.8	3.0
Department of State <sup>1</sup>	4.7	5.9	5.6	5.3	.4	.5	.9	1.0	.9	1.0	1.0
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	119.2 5.1 26.1 57.6 8.5	114.6 6.4 24.0 46.1 13.2	156.9 5.0 30.1 73.2 18.9	226.1 8.2 59.8 91.7 20.9	273.4 5.6 79.5 134.2 16.1	370.7 4.9 83.3 203.1 22.5	375.2 5.0 130.6 173.9 21.3	381.2 5.7 159.4 149.2 18.2	401.0 5.1 151.6 169.6 21.2	490.5 4.5 150.0 250.6 25.1	675.6 5.7 173.0 406.0 23.6
Federal Transit Admin Maritime Administration National Highway Traffic	.0 .9	.0 1.7	.0 1.8	10.9 1.7	7.8 1.7	10.9 2.5	5.6 .0	6.0 .0	7.4 .0	4.1 .0	4.1 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 1.7	21.4 .6	25.8 .7	31.6 .6	25.3 .6	39.7 .6	33.2 .0	36.4 .0	41.6 .0	50.4 .0	58.7 .0
Administration	2.4	1.4	1.4	.5	2.6	3.2	5.6	6.3	4.6	5.9	4.5
Dept of the Treasury, total Bureau of Engraving &	18.7	24.1	20.8	11.1	9.2	48.9	50.5	50.9	52.6	60.7	74.8
Printing Internal Revenue Service Off of Thrift Supervision US Customs Service United States Secret Service	1.4 16.5 .0 .4	2.7 17.5 3.0 .5 .4	1.8 17.5 .8 .2	3.2 6.5 .7 .1	1.6 6.1 .5 .5	1.3 45.8 .6 .7	1.6 47.5 .5 .5	1.6 47.9 .6 .4	2.7 47.9 .7 .8 .5	2.2 55.5 .8 1.7 .5	2.3 70.2 .9 .9
Department of Veterans Affairs	215.6	193.8	200.9	207.4	223.5	218.8	235.3	231.0	269.1	311.1	307.0
						l	1				

#### Table C-98a. Federal obligations for research, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										1 6	ige 3 0i 3
Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.5 .4 .4 315.2 1.3	1.7 .7 .9 353.1 1.4	1.7 1.9 .8 404.3 1.6	2.1 .9 .8 361.5 1.6	1.4 .9 .1 402.3 1.7	1.4 .9 .0 401.6 2.3	NA .9 .0 380.8 2.8	NA .9 .1 409.1 3.1	NA .7 .0 477.2 3.0	NA .7 .0 462.9 4.2	NA .8 1.2 446.9 2.7
Federal Trade Commission General Services Admin	.5 .7	1.0 .0	1.3 .0	.9 .0	.7 .0	.6 .0	.5 .0	.7 .0	1.1 .0	1.1 .0	1.4 .0
Cooperation Agency, total	305.2	357.4	300.1	359.2	216.2	272.7	205.0	176.7	172.9	163.2	143.6
Development <sup>2</sup> Library of Congress	305.2 1.5	357.4 1.7	300.1 1.8	359.2 1.8	216.2 1.9	272.7 2.1	205.0 2.2	176.7 .5	172.9 .5	163.2 .6	143.6 .6
Nat'l Aero & Space Admin Nat'l Archives & Records Admin National Science Foundation Nuclear Regulatory Commission Office of Thrift Supervision	3,060.7 .3 1,689.5 108.8 4.1	3,371.2 .6 1,785.2 108.8 NA	3,229.3 .6 1,868.4 119.0 NA	3,548.7 .3 1,881.9 119.8 NA	3,840.6 .3 2,040.4 90.7 NA	4,046.1 .1 2,149.3 88.2 NA	3,878.0 .1 2,188.3 70.9 NA	4,184.9 .1 2,248.5 62.1 NA	4,413.7 .1 2,289.3 51.7 NA	4,433.1 .1 2,512.9 49.2 NA	4,392.0 .1 2,698.3 46.6 NA
Smithsonian Institution Social Security Admin Tennessee Valley Authority United States Arms Control &	84.0 NA 21.7	98.0 NA 18.8	98.0 NA 24.4	102.0 NA 27.9	124.2 NA 25.9	124.0 NA 26.4	127.0 11.5 4.2	130.0 13.6 4.0	120.0 17.4 .8	122.0 53.7 .0	129.0 36.9 .0
Disarmament Agency 1 US Information Agency US Internat'l Trade Comm	.2 .5 9.1	.4 .1 9.9	2.1 .0 12.3	1.5 1.1 12.2	1.3 .6 9.4	1.1 .3 12.2	.7 .1 3.2	1.2 .2 5.7	1.2 .3 7.2	.1 .1 6.9	.0 .1 7.1

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

**NOTES:** Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-99. Federal obligations for basic research, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 2
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6	10,602.0
Departments:											
Dept of Agriculture, total Agricultural Research Svc Cooperative State Research,	256.4 NA	275.7 NA	314.1 186.4	330.8 192.9	362.0 215.3	392.6 240.6	445.4 250.2	432.9 247.7	445.5 253.4	480.6 271.1	484.9 282.7
Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc	NA NA 6.4	NA NA NA	83.9 3.6 NA	91.3 3.9 NA	98.8 3.9 NA	99.6 4.4 NA	141.5 4.6 NA	131.7 4.5 NA	132.8 6.3 NA	145.8 6.7 NA	142.6 6.9 NA
Economics & Statistics Svc Forest Service Nat'l Agri Statistics Svc	NA 31.4 NA	6.6 33.7 NA	NA 38.1 .0	NA 38.7 2.3	NA 38.8 2.5	NA 41.2 2.7	NA 44.1 2.8	NA 42.2 2.6	NA 49.4 1.1	NA 51.6 1.2	NA 50.0 1.0
Office of International Cooperation & Development Office of Transportation	.0 .0	2.3 .0	1.7 .5	1.1 .5	2.3 .5	3.6 .6	1.5 .6	3.7 .5	1.9 .5	3.6 .5	1.7 NA
Science & Ed Admin, total Agricultural Research Svc Cooperative State Rsch Svc	218.6 148.2 70.5	233.0 157.8 75.2	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration	11.9 .6 .5 2.0	15.9 .5 .3 2.0	16.2 .4 .2 NA	16.9 .3 .0 NA	19.2 .3 .5 NA	20.6 .4 .0 NA	23.2 .4 .0 NA	26.5 .5 .0 NA	25.8 .7 .0 NA	30.9 1.3 .0 NA	29.1 1.2 .0 NA
National Institute of Standards & Technology	8.8	12.8	15.6	16.5	18.4	20.2	22.1	25.7	25.1	26.3	27.9
National Oceanic & Atmospheric Administration Office of the Secretary	.0 .0	.0 .3	.0 .0	.0	.0	.0 .0	.0 .8	.0 .3	.0 .0	3.2 .0	.0 .0
Department of Defense, total  Department of the Air Force  Department of the Army  Department of the Navy  Defense Agencies	471.5 105.0 115.0 192.1 59.3	540.3 108.2 132.2 214.9 85.1	604.3 125.8 148.1 238.0 92.4	686.7 145.8 187.7 280.3 72.9	785.6 164.2 208.3 305.4 107.7	847.9 192.4 222.1 315.8 117.6	861.4 198.3 240.8 343.1 79.2	923.9 216.5 248.5 337.3 121.7	907.6 221.6 217.0 354.3 114.8	876.9 196.4 165.7 341.8 173.0	947.9 202.8 187.2 354.0 203.9
Department of Education	20.6	17.6	20.6	14.2	14.2	12.2	14.6	4.5	3.1	4.4	4.4
Department of Energy	463.0	523.1	586.3	642.2	767.7	830.4	942.6	959.7	1,068.5	1,184.8	1,410.9
Department of Health & Human Services, total Alcohol, Drug Abuse, & Mental	1,576.0	1,762.7	1,900.4	2,144.7	2,475.4	2,814.5	3,232.5	3,338.8	3,827.9	4,081.4	4,388.0
Health Administration  HIth Resources & Svcs Admin  Health Services Admin  Human Development Services	94.6 NA 2.0 .0	104.7 NA 2.0 .0	116.3 NA 3.8 .4	117.3 .6 NA .4	145.0 .8 NA .0	170.8 .8 NA .0	196.8 .9 NA .0	203.4 1.0 NA .0	232.2 1.3 NA .0	265.8 1.1 NA .0	308.0 1.2 NA .0
National Insts of Health	1,463.7	1,642.3	1,766.8	2,020.7	2,313.0	2,624.8	3,018.0	3,118.6	3,575.5	3,795.1	4,053.3
Office of the Assistant Secretary for Health Office of the Secretary	13.6 2.1	11.6 2.0	12.4 .6	5.7 .0	16.6 .0	18.1 .0	16.9 .0	15.8 .0	18.9 .0	19.4 .0	25.6 .0
Dept of the Interior, total Bonneville Power Admin Bureau of Mines Bureau of Reclamation Geological Survey	72.5 .0 13.7 .1 49.0	71.6 .0 11.5 .2 47.3	80.7 .4 13.6 .1 53.5	76.5 NA 15.9 .1 52.6	103.0 NA 23.5 .1 64.7	125.9 NA 40.5 .1 78.9	138.3 NA 49.9 .3 80.5	133.0 NA 44.9 .1 83.4	134.9 NA 45.6 .1 84.9	126.5 NA 32.1 .1 89.5	188.9 NA 43.9 - 140.2
Office of the Secretary Office of Water Rsch & Tech US Fish & Wildlife Service	1.4 4.6 3.7	2.2 6.6 3.8	1.5 7.6 3.9	.5 3.3 4.1	7.4 .5 6.9	.1 .4 5.9	1.9 NA 5.7	1.0 NA 3.6	.0 NA 4.3	.0 NA 4.8	.0 NA 4.8
Department of Justice, total Office of Justice Programs	7.9 7.9	9.5 9.5	4.6 4.6	3.1 3.1	3.6 3.6	4.7 4.7	4.2 4.2	5.3 5.3	8.1 8.1	7.6 7.6	6.8 6.8

#### Table C-99. Federal obligations for basic research, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Labor, total	2.3 1.8	3.9 3.9	3.7 3.7	6.5 6.5	5.3 5.3	5.0 5.0	3.3 3.3	0.9 .9	1.4 1.4	0.4 .4	0.3
Administration	.5	.0	.0	.0	.0	NA	NA	NA	NA	NA	NA
Department of State, total  Departmental Funds	-	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	2.6 .0	3.1 .0	3.4 .0
Dept of Transportation, total	.0 .0 NA	.0 .0 NA	1.2 .3 .7	1.0 .0 1.0	.9 .4 .5	3.5 .0 3.5	1.1 .0 1.1	.6 .0 .6	.2 .0 .2	.0 .0 .0	.0 .0 .0
Administration	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
Dept of the Treasury, totalBureau of Engraving &	.2	1.7	2.3	2.2	3.5	4.0	4.8	5.1	4.7	4.8	3.4
Printing Internal Revenue Service United States Secret Service	.0 .2 NA	.0 1.7 .0	.0 2.3 .0	.0 2.2 .0	.6 2.9 .0	.8 3.2 .0	.3 4.4 .0	.4 4.5 .2	.1 4.4 .2	.1 4.7 .1	.5 2.9 .0
Department of Veterans Affairs	9.5	14.3	15.0	12.9	14.1	15.8	15.4	14.8	17.2	17.3	16.6
Other agencies:											
Consumer Product Safety Comm Environmental Protection Agcy Federal Emergency Management	.0 10.1	.0 13.6	.1 10.5	.0 32.7	.0 22.2	.0 29.6	.0 38.6	.0 38.5	.0 31.1	.0 27.2	.0 50.7
Agency, totalFederal Trade Commission	3.0 .4 -	2.6 1.5 .0	2.6 .9 .0	1.4 1.0 .0	.0 1.2 .0	.0 1.3 .1	.0 1.5 .1	.0 1.6 .0	.0 .0 .0	.0 .0 .0	.0 .0 .0
International Development Cooperation Agency, total Agcy for Internat'l Dvlpmt Library of Congress Nat'l Aero & Space Admin	.0 .0 .1 512.8	.0 .0 .1 559.1	.0 .0 .2 531.1	.0 .0 .1 535.7	4.1 4.1 .3 617.0	3.0 3.0 .6 754.5	1.7 1.7 .6 750.9	4.3 4.3 .4 916.7	2.8 2.8 .4 1,013.7	3.0 3.0 .4 1,112.7	3.1 3.1 .4 1,417.4
Nat'l Archives & Records Administration	NA	NA	NA	NA	NA	NA	.1	.0	.5	.2	.1
National Science Foundation Smithsonian Institution Tennessee Valley Authority US Information Agency	733.3 36.9 4.1 .0	815.2 41.0 4.6 .0	896.6 44.9 4.8 .1	916.1 52.4 4.6 .0	999.1 56.0 5.6 .0	1,132.3 63.6 5.1 .0	1,261.8 71.1 5.5 .0	1,275.2 63.3 7.3 .0	1,371.2 71.5 3.9 .0	1,433.2 75.1 3.2 .0	1,562.6 80.2 2.9 .0

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

## Table C-99a. Federal obligations for basic research, by agency: fiscal years 1990-2000

### [Dollars in millions]

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Selected agency												age 1 of 2
Poper	Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
Departments:											1999	2000
Dept of Agriculture, total   Signature   Signature   Signature   Signature   Marketing Svc   Signature   Marketing Svc   Signature   Signature   Marketing Svc   Signature   Signature	Total, all agencies	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,941.9	15,613.0	17,366.9	18,209.4
Agricultural Marketing Svc         25-00         0 <th< td=""><td>Departments:</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Departments:											
Ed. & Extension Service 153.7   170.4   189.6   192.5   194.7   186.0   148.7   188.9   163.5   227.7   219.4   Economic Research Service 7.1   7.6   8.2   10.6   9.9   5.4   5.3   7.2   6.5   5.6   Fod Safety inspection Swc	Agricultural Marketing Svc Agricultural Research Svc	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Foreign Agricultural Svc	Ed, & Extension Service											
Stockyards Administration	Foreign Agricultural SvcForest Service	.0	.0	.0	.0	.7	.5	.9	.9	.9	.9	.9
Department of Commerce, total   31.4   34.3   34.5   37.2   40.1   39.3   37.5   39.2   39.6   45.7   44.8	Stockyards Administration Nat'l Agri Statistics Svc											
Bureau of the Census		2.6	2.2	1.2	1.2	.0	NA	NA	NA	NA	NA	NA
Standards & Technology   28.6   31.9   33.6   36.5   39.8   38.9   36.7   38.2   38.6   40.8   40.3	Bureau of the Census											
Department of Defense, total	Standards & Technology	28.6	31.9	33.6	36.5	39.8	38.9	36.7	38.2	38.6	40.8	40.3
Department of the Air Force		.0	.0	.0	.3	.0	.0	.0	.0	.4	3.9	3.9
Department of Energy	Department of the Air Force  Department of the Army  Department of the Navy	197.0 185.1 365.0	209.2 188.6 388.0	205.8 204.9 393.8	218.7 215.7 422.0	242.4 213.3 400.1	206.8 218.8 409.4	227.9 195.1 376.7	188.1 178.3 347.2	185.6 182.0 329.0	195.3 178.9 344.6	209.5 189.5 375.8
Department of Health & Human   Services, total   A,649.0   5,050.1   5,058.7   5,696.7   5,884.0   6,061.1   6,504.6   6,851.8   7,355.4   8,428.4   8,588.9   Agency for Health Care Policy & Research   Department of Justice Programs   A,649.0   A,649.0	Department of Education	4.9	8.6	7.5	5.3	5.5	5.5	3.5	3.0	2.1	2.1	2.0
Śervices, total Agency for Health Care Policy & Research         4,649.0         5,050.1         5,058.7         5,696.7         5,884.0         6,061.1         6,504.6         6,851.8         7,355.4         8,428.4         8,588.9           Alcohol, Drug Abuse, & Mental Health Administration         386.2         459.1         NA	Department of Energy	1,504.8	1,686.5	1,736.4	1,754.8	1,603.2	1,634.4	1,929.7	1,970.9	2,028.8	2,230.0	2,285.8
& Research          0          0           0            0	Services, total	4,649.0	5,050.1	5,058.7	5,696.7	5,884.0	6,061.1	6,504.6	6,851.8	7,355.4	8,428.4	8,588.9
Health Administration	& Research	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0
Bureau of Land Management 0 1.1 6 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Health Administration HIth Resources & Svcs Admin	1.2	1.5	1.3	1.1	.8	1.0	1.0	1.1	1.1	1.1	1.2
National Park Service         .0         .0         .0         .0         .6         .7         .5         .5         .5         .5         .6         .6           US Fish & Wildlife Service         5.6         6.2         6.4         6.4         0         .0 <t< td=""><td>Bureau of Land Management Bureau of Mines Bureau of Reclamation</td><td>.0 40.6 .1</td><td>1.1 42.8 .1</td><td>.6 43.7 .0</td><td>.6 44.6 .0</td><td>.0 25.4 .0</td><td>.0 .0 .0</td><td>.0 NA .0</td><td>.0 NA .0</td><td>.0 NA .0</td><td>.0 NA .0</td><td>.0 NA .0</td></t<>	Bureau of Land Management Bureau of Mines Bureau of Reclamation	.0 40.6 .1	1.1 42.8 .1	.6 43.7 .0	.6 44.6 .0	.0 25.4 .0	.0 .0 .0	.0 NA .0	.0 NA .0	.0 NA .0	.0 NA .0	.0 NA .0
Öffice of Justice Programs         8.8         6.4         5.3         5.0         5.9         8.1         12.6         12.4         16.0         20.1         15.2           Department of Labor, total          .3         .3         .2         5.6         5.8         13.3         11.5         11.3         11.1	National Park Service	.0	.0	.0	.6	.7	.5	.5	.5	.5	.6	.6
Bureau of Labor Statistics        .0       .0       .0       5.4       5.6       13.3       11.5       11.3       11.1       11												
Department of State 1	Bureau of Labor Statistics Employment & Training Admin	.0 .3	.0 .3	.0	5.4 .2	5.6 .2	13.3 .0	11.5 .0	11.3 .0	11.1 .0	11.1 .0	11.1 .0
	Department of State <sup>1</sup>	3.5	4.6	4.9	4.8	.0	.0	.0	.0	.0	.0	.0

### Table C-99a. Federal obligations for basic research, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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											190 L 01 L
Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Dept of Transportation, total	.0 .0 .0	.0 .0 .0	1.2 1.2 .0	1.7 1.7 .0	3.0 3.0 .0	46.9 46.9 .0	38.4 38.4 .0	37.5 37.5 .0	35.0 35.0 .0	39.9 39.9 .0	67.6 67.6 .0
Dept of the Treasury, total	3.4	3.6	3.6	6.5	-	-	-	-	-	-	-
PrintingInternal Revenue Service	.0 3.4	.0 3.6	.0 3.6	.0 6.5	.0	.0	.0	.0	.0	.0	.0
Department of Veterans Affairs	16.2	16.1	15.7	13.3	14.4	12.4	12.5	13.6	120.0	139.9	137.5
Other agencies:											
Environmental Protection Agcy International Development	73.6	91.2	110.4	89.1	101.4	70.3	51.7	51.1	57.4	75.7	78.8
Cooperation Agency, total	5.0	5.7	5.8	8.4	1.8	2.3	2.0	.1	1.8	.1	.1
Development <sup>2</sup> Library of Congress Nat'l Aero & Space Admin	5.0 .3 1,636.9	5.7 .4 1,705.6	5.8 .4 1,738.2	8.4 .3 1,800.1	1.8 .4 1,963.9	2.3 .5 1,978.2	2.0 .5 1,980.9	.1 .0 2,094.8	1.8 .0 2,023.8	.1 .0 2,122.6	.1 .0 2,448.8
Nat'l Archives & Records Admin National Science Foundation Smithsonian Institution Tennessee Valley Authority	.2 1,586.3 84.0 4.7	.4 1,676.2 98.0 1.9	.5 1,741.5 98.0 2.1	.2 1,743.8 102.0 9.9	.2 1,870.7 124.2 8.9	.0 1,973.3 124.0 9.0	.0 2,007.4 127.0 .3	.0 2,056.7 130.0 .0	.0 2,118.7 120.0	.0 2,332.7 122.0 .0	.0 2,513.8 129.0 .0

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** - = Amount less than 50 thousand dollars

NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-100. Federal obligations for applied research, by agency: fiscal years 1979-1989

### [Dollars in millions]

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											age 1 of 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5
Departments:											
Dept of Agriculture, total	375.5 NA .4 NA	381.8 1.6 1.0 NA	426.9 1.7 .9 181.5	435.7 1.7 1.0 186.2	455.5 2.1 1.1 202.6	442.2 2.2 1.2 183.7	465.6 2.9 1.3 191.8	463.5 2.6 1.3 188.3	473.4 2.7 1.2 201.1	504.6 2.7 1.3 208.2	517.3 2.8 1.3 209.4
Inspection Service	.0	.0	.0	.0	.0	.0	.0	4.2	4.9	5.6	7.4
Cooperative State Research, Ed, & Extension Service Economic Research Service Economics, Stat, & Coop Svc Economics & Statistics Svc Forest Service	29.1 NA	NA NA NA 24.5 72.3	115.5 35.8 NA NA 81.8	127.7 35.3 NA NA 69.0	133.5 34.9 NA NA 65.1	136.2 39.3 NA NA 63.9	142.8 41.7 NA NA 65.7	137.4 40.1 NA NA 67.5	138.0 38.5 NA NA 73.5	152.6 41.4 NA NA 79.9	164.7 42.6 NA NA 77.5
Grain Inspection Packers & Stockyards Administration Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	.0 NA NA	.0 NA NA	.0 .0 7.5	.0 8.5 4.7	.0 8.2 5.1	.0 6.0 5.5	.8 6.7 5.6	.6 12.8 5.4	.7 6.8 2.3	.6 8.2 2.4	.8 8.4 1.9
Cooperation & Development Office of Transportation	.0 .0	2.6 .0	1.9 .3	1.2 .3	2.5 .3	3.9 .3	5.8 .5	2.9 .4	3.3 .4	1.2 .4	.6 NA
Science & Ed Admin, total Agricultural Research Svc Cooperative State Rsch Svc	274.8 172.7 102.1	279.8 170.8 109.0	NA NA NA								
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	10.2	238.5 1.4 2.2 10.1	233.2 2.6 1.6 NA	259.2 1.6 1.6 NA	265.6 1.9 4.8 NA 63.1	276.1 2.0 5.1 NA	301.0 2.1 2.0 NA 64.5	312.9 2.1 2.3 NA	312.8 2.1 5.0 NA	311.5 2.4 4.2 NA 72.6	321.9 1.8 1.0 NA 77.6
Standards & Technology	43.0	46.1	50.6	57.4	03.1	63.5	64.5	63.5	64.3	72.0	77.0
National Oceanic & Atmospheric Administration National Telecommunications &	142.7	168.8	168.5	188.5	188.9	197.7	224.4	237.5	234.4	225.0	234.6
Information Administration Office of the Secretary	2.4	9.6 .2	9.9	10.1 .0	6.9 .0	7.7	7.9 .1	7.6 .0	7.0	7.3 .0	6.9 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	375.2	1,721.4 429.1 347.1 396.2 549.1	1,996.6 491.5 388.4 460.0 656.7	2,266.1 488.1 451.6 498.4 828.1	2,437.0 524.2 485.3 521.6 905.9	2,200.7 547.7 486.7 449.6 716.6	2,306.9 538.4 582.6 448.2 737.7	2,303.3 542.5 578.8 447.1 735.0	2,440.0 563.2 692.9 432.5 751.3	2,362.2 576.7 588.0 406.0 791.5	2,708.2 604.6 636.3 429.2 1,038.1
Department of Education	72.8	70.0	33.2	56.3	61.9	68.7	77.3	91.3	103.8	106.6	117.5
Department of Energy	668.9	754.2	827.3	1,053.9	1,193.4	1,194.5	1,198.4	1,080.7	1,029.4	1,050.6	1,020.8

# Table C-100. Federal obligations for applied research, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 2 of 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human	1,439.7	1,570.1	1,591.9	1,460.9	1,545.4	1,651.5	1,795.8	1,850.8	2,194.0	2,415.6	2,700.4
Services, total	118.9	128.8	121.4	128.7	155.4	165.2	179.7	191.5	241.1	286.6	384.7
PreventionFood & Drug Administration Health Care Financing Admin	76.3	87.3	74.8	75.0	78.2	46.3	47.6	52.2	66.2	88.7	117.8
	61.0	75.4	71.4	73.0	74.2	77.8	82.1	79.4	85.0	91.0	99.0
	31.8	45.7	38.6	29.1	30.2	33.1	33.5	29.0	27.3	28.2	49.1
Health Resources Admin HIth Resources & Svcs Admin Health Services Admin Human Development Services National Insts of Health	4.9	5.1	5.0	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	6.1	10.2	15.4	17.3	11.2	8.0	9.0	9.3
	8.2	6.0	6.4	NA	NA	NA	NA	NA	NA	NA	NA
	14.9	19.1	39.5	8.3	6.9	4.5	5.8	6.8	9.4	7.1	8.5
	1,066.4	1,145.1	1,181.5	1,103.8	1,165.2	1,285.6	1,410.1	1,469.0	1,739.1	1,885.6	2,008.5
Office of the Assistant Secretary for Health Office of the Secretary Social Security Admin	16.3	14.1	16.3	8.2	.0	.0	.0	.0	.0	.0	.0
	22.6	22.0	18.9	13.1	14.4	10.0	9.4	6.1	8.2	4.7	7.8
	18.3	21.4	18.0	15.5	10.8	13.5	10.4	5.6	9.8	14.7	15.8
Dept of Housing & Urban Dvlpmt	23.8	19.6	16.7	10.3	11.3	6.3	6.5	5.3	5.5	6.3	6.1
Dept of the Interior, total Bonneville Power Admin Bureau of Land Management Bureau of Mines Bureau of Reclamation	266.9	282.8	289.2	275.0	254.7	254.3	231.0	234.9	247.3	266.0	253.0
	.0	.0	6.1	NA	NA	NA	NA	NA	NA	NA	NA
	1.1	1.3	1.5	2.4	2.0	1.8	2.8	2.1	2.1	2.2	2.0
	65.4	71.3	54.4	65.2	55.9	56.7	36.7	36.6	39.6	54.1	49.3
	11.3	12.7	13.3	8.9	8.7	8.8	10.9	9.6	10.1	3.6	3.5
Geological Survey Minerals Management Service National Park Service Office of the Secretary Office of Surface Mining Reclamation & Enforcement	96.1 NA 8.9 .0	98.5 NA 8.2 .0 7.5	115.8 NA 10.4 .0	99.4 .0 11.2 .0	89.9 1.5 13.7 .0	125.1 1.5 14.0 .0	130.0 1.4 15.0 .0	127.8 1.1 17.3 .0	131.7 1.0 18.5 .0	135.8 1.2 19.4 .1	126.8 2.2 19.4 .0
Office of Water Rsch & Tech	13.2	11.8	8.2	6.8	8.	3.2	NA	NA	NA	NA	NA
US Fish & Wildlife Service	65.9	71.4	73.9	79.6	80.6	42.3	32.2	38.1	43.3	48.7	49.1
Department of Justice, total	20.9	19.2	14.9	13.2	17.1	13.2	15.1	17.0	11.8	9.8	10.7
	.5	.9	1.7	.9	1.3	1.2	1.1	2.7	2.2	2.1	2.1
	.7	.8	.4	1.3	.9	.7	.5	.8	.7	.6	.5
Service Office of Justice Programs Office of Legal Policy	.1	.2	.1	.3	.3	.3	.2	.2	.2	.3	.1
	18.0	16.1	12.0	10.3	14.4	11.0	13.0	13.2	8.6	6.8	8.0
	1.6	1.3	.7	.4	.2	.0	.3	.2	.1	.0	.0
Department of Labor, total	39.8	32.6	54.5	10.6	12.7	11.2	9.1	8.7	19.0	26.4	21.8
	.9	.9	.3	.3	.7	.5	.6	.6	6.5	7.0	7.0
	5.3	4.9	3.2	1.4	1.4	.9	-	.0	1.0	.1	.1
	24.2	16.2	45.1	2.1	2.6	1.0	.3	2.6	4.0	6.5	5.7
Cooperative Programs	NA	NA	NA	NA	NA	.3	.3	.2	.3	.4	.3
Labor-Management Services Administration Occupational Safety & Health	2.7	2.8	1.8	.7	.9	NA	NA	NA	NA	NA	NA
Administration	5.1	6.3	3.0	4.9	5.3	5.1	4.5	3.6	4.1	4.2	4.5
	1.6	1.4	1.1	.9	1.5	1.9	1.7	1.3	1.8	5.2	2.5
	NA	NA	.1	.3	.3	.3	.2	.1	.3	.3	.3
Administration	NA	NA	NA	NA	NA	1.2	1.6	.3	1.0	2.7	1.4
Department of State, total Departmental Funds	2.6	2.0	1.6	1.5	1.5	1.6	1.5	1.5	.3	1.0	1.3
	2.6	2.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

#### Table C-100. Federal obligations for applied research, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	67.0 10.9 7.5 4.4 7.5	82.4 8.1 8.2 4.6 7.9	87.4 14.7 8.2 5.1 6.2	65.7 1.7 7.0 5.3 3.1	71.7 .8 12.5 7.3 2.8	74.2 7.2 15.0 6.1 12.3	70.2 5.4 17.3 6.3 11.4	67.6 3.5 14.0 14.7 12.5	68.6 3.7 11.1 20.7 10.4	91.2 5.4 13.3 43.7 8.2	120.5 4.6 23.6 56.6 7.5
Federal Transit Admin Maritime Administration National Highway Traffic	1.1 NA	8.9 NA	9.3 8.9	19.4 5.6	18.3 5.7	1.0 5.1	.5 7.0	.0 6.2	.0 3.1	.0 .5	.0 .0
Safety Administration Office of the Secretary	30.0 .6	38.6 .6	29.4 .7	21.3 .3	21.4 .3	24.7 .9	20.9 .9	16.1 .4	18.9 .4	19.1 .7	26.2 1.3
Research & Special Programs Administration	5.0	5.5	4.9	2.1	2.6	1.8	.5	.3	.2	.4	.7
Dept of the Treasury, total Bureau of Alcohol, Tobacco, &	4.5	4.0	2.9	5.9	6.7	6.6	13.6	12.7	12.7	11.1	13.0
FirearmsBureau of Engraving &	.7	.3	.1	NA	NA	NA	NA	NA	NA	NA	NA
Printing Internal Revenue Service US Customs Service United States Secret Service	.6 3.3 .0 NA	1.3 2.2 .1 .0	.9 1.8 .1 .0	2.8 3.1 - .0	1.4 5.0 .0 .3	1.4 4.9 .1 .1	3.1 10.2 .1 .2	2.7 9.5 .2 .2	2.7 9.7 .2 .1	1.1 9.0 .7 .3	.9 11.3 .4 .4
Department of Veterans Affairs	101.8	103.6	112.7	110.1	132.0	156.1	193.7	155.1	173.1	178.8	197.1
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Community Services Admin Consumer Product Safety Comm Environmental Protection Agcy	1.7 .7 1.8 1.8 248.9	2.2 .6 1.3 1.6 231.5	2.2 .3 1.9 .2 207.8	2.0 .3 NA .1 210.7	2.1 .2 NA .3 152.4	2.1 .4 NA 1.1 142.3	2.4 .2 NA 1.4 176.0	2.1 .2 NA 1.1 179.3	1.9 .1 NA .6 246.1	1.8 .2 NA .1 240.7	1.1 .8 NA .5 222.6
Fed Communications Commission	2.9	3.4	1.8	1.2	1.3	.9	1.2	.9	1.0	1.2	1.1
Federal Emergency Management Agency, total Federal Trade Commission General Services Admin International Development	6.7 1.1 .1	6.7 1.5 .1	6.4 .2 .4	7.8 .2 .5	3.3 .2 .2	6.1 .2 .4	2.9 .3 .3	.0 .3 .9	.0 .5 1.6	.0 .4 2.3	.0 .4 .5
Cooperation Agency, total	66.9	79.7	86.4	127.9	152.6	164.0	158.1	180.7	151.2	132.1	216.0
Agcy for Internat'l Dvlpmt	66.9 .2 .5 938.4	79.7 .1 .5 1,050.5	86.4 .0 .7 876.0	127.9 .0 .7 871.4	152.6 .0 1.0 927.8	164.0 .0 1.5 954.7	158.1 .0 1.5 1,032.7	180.7 .0 1.1 1,152.3	151.2 .0 1.1 1,255.5	132.1 .0 1.2 1,218.9	216.0 .0 1.2 1,461.4
Administration	NA	NA	NA	NA	NA	NA	.1	.0	.3	.3	.1
National Science Foundation  Nuclear Regulatory Commission  Office of Personnel Management  Office of Thrift Supervision  Tennessee Valley Authority	66.8 148.8 1.4 .9 12.4	58.4 182.7 2.6 1.2 11.2	58.9 219.7 3.4 1.0 9.4	57.1 220.3 .0 2.7 8.1	62.9 207.3 .0 3.0 6.7	70.5 190.7 .0 2.6 9.2	83.8 150.0 .0 2.8 8.9	78.1 123.8 .0 3.3 10.5	99.3 122.5 .0 3.4 13.8	99.6 108.5 .0 3.4 15.3	107.8 114.8 .0 4.1 11.7
United States Arms Control & Disarmament Agency US Information Agency US Internat'l Trade Comm	2.7 .1 3.4	3.0 .1 2.1	1.6 1.0 3.4	1.3 .0 3.8	.8 - 4.7	1.2 1.4 5.0	1.1 .1 5.8	.9 1.6 6.9	.4 .0 7.2	.8 .1 8.1	1.2 .0 8.7

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-100a. Federal obligations for applied research, by agency: fiscal years 1990-2000

### [Dollars in millions]

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Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Total, all agencies	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,309.3	16,454.8	16,470.1
Departments:											
Dept of Agriculture, total  Agricultural Cooperative Svc  Agricultural Marketing Svc  Agricultural Research Svc  Cooperative State Research,	542.1 2.7 1.7 218.2	617.9 2.8 3.7 241.1	665.8 3.4 4.1 257.1	635.8 2.9 4.1 233.3	716.2 3.7 4.2 257.9	703.8 NA 4.2 259.6	670.0 NA 4.2 256.6	700.0 NA 4.2 261.3	730.1 NA 4.0 288.0	800.7 NA 4.0 308.2	755.3 NA 4.3 316.7
Ed, & Extension Service	170.5	206.4	228.6	226.2	234.3	231.7	213.7	243.6	223.0	278.5	231.6
Economic Research Service Food Safety Inspection Svc Foreign Agricultural Svc	43.5 .0 .0	46.8 .0 .0	50.6 .0 .0	48.3 .0 .0	45.3 .0 .4	48.4 .0 .4	47.7 .0 .4	47.7 .0 .5	64.4 .0 .5	58.5 .0 .5	50.1 .0 .5
Forest Service	93.5	103.6	106.9	107.8	156.5	154.8	143.0	137.4	143.0	144.8	144.8
Stockyards Administration	.2	.7	1.5	1.8	1.8	.3	.5	.6	.5	.5	.7
Human Nutrition Info Svc Nat'l Agri Statistics Svc Office of International	9.0 1.9	9.9 2.2	10.7 2.4	8.4 2.6	7.0 2.6	NA 2.7	NA 2.5	NA 2.3	NA 2.2	NA 2.2	NA 2.2
Cooperation & Development Rural Business-Coop Svc	.9 NA	.7 NA	.4 NA	.4 NA	.0 2.4	NA 1.6	NA 1.4	NA 2.5	NA 4.4	NA 3.5	NA 4.5
Department of Commerce, total Bureau of the Census Economic Development Admin National Institute of	345.6 2.1 1.2	415.4 2.3 1.4	561.4 2.4 .5	544.9 2.9 .0	678.2 2.5 .6	853.1 2.6 .5	813.1 1.6 .6	768.8 2.4 .6	767.4 4.6 .6	836.3 8.8 .6	815.0 4.5 .6
Standards & Technology National Oceanic &	83.2	92.5	115.8	136.4	167.5	333.1	318.2	293.3	266.7	289.6	299.3
Atmospheric Administration	252.4	315.6	438.7	401.4	502.7	510.4	480.8	468.8	491.7	533.4	504.5
National Telecommunications & Information Administration Office of the Secretary	6.8 .0	3.6 .0	4.0 .0	4.2 .0	4.8 .0	6.4	11.9	3.8 .0	3.8 .0	3.9 .0	6.2 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	442.6	2,723.8 621.2 671.9 486.0 944.7	2,974.5 584.7 727.8 499.0 1,162.9	3,515.2 669.1 802.8 574.1 1,469.2	3,040.0 571.9 639.3 447.0 1,381.7	2,950.1 627.7 633.3 470.5 1,218.6	2,857.6 654.4 475.3 516.8 1,211.1	2,786.9 628.5 531.7 538.5 1,088.2	2,939.1 551.3 635.9 493.2 1,258.7	3,111.7 557.3 699.3 551.0 1,304.0	3,001.1 513.8 582.3 526.4 1,378.6
Department of Education	125.3	123.1	119.5	128.3	131.2	132.8	132.1	135.0	146.7	151.9	170.9
Department of Energy	1,065.7	1,587.2	1,676.1	1,685.4	1,679.2	1,825.6	1,432.5	1,596.8	1,758.7	1,900.1	2,087.5
Department of Health & Human Services, total Administration on Aging Administration for Children	2,818.1 NA	3,112.4 2.9	2,886.8 2.5	3,495.9 2.7	3,852.5 3.5	4,014.9 3.0	4,041.3 .2	4,376.3 .2	4,663.1 2.4	5,268.7 1.2	5,511.4 1.1
& Families	NA	13.5	34.3	18.5	10.4	11.2	12.6	17.4	23.5	18.8	28.0
& Research	44.2	93.0	97.8	105.6	141.2	124.0	116.0	134.1	138.8	160.9	197.3
Health Administration	415.0	463.9	NA								
Centers for Disease Control & Prevention Food & Drug Administration Health Care Financing Admin Hith Resources & Svcs Admin Human Development Services	99.0	113.4 125.0 69.1 9.5 NA	146.9 135.7 75.5 8.8 NA	162.5 154.5 68.2 8.5 NA	206.8 169.4 80.0 9.8 NA	317.4 170.5 74.5 11.2 NA	296.7 170.8 52.7 10.1 NA	323.0 158.6 43.6 12.1 NA	343.6 142.9 51.2 11.9 NA	382.6 141.2 50.0 11.9 NA	468.6 151.7 55.0 11.9 NA
National Insts of Health	2,074.1	2,193.5	2,341.3	2,942.9	3,197.4	3,273.6	3,373.3	3,669.0	3,934.9	4,488.2	4,583.7
Office of the Assistant Secretary for Health Off of the Secretary, total Office of the Assistant	5.8 5.0	9.6 8.8	6.0 5.0	.0 8.0	.0 11.7	.0 9.1	NA 9.0	NA 18.4	NA 13.9	NA 14.0	NA 14.0
Sec, Planning & Eval	NA 11.8	NA 10.2	NA 33.0	NA 24.5	NA 22.2	NA 20.4	9.0 NA	18.4 NA	13.9 NA	14.0 NA	14.0 NA

# Table C-100a. Federal obligations for applied research, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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										Pa	age 2 of 3
Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Dept of Housing & Urban Dvlpmt	6.6	9.4	8.8	8.1	13.7	14.2	11.2	11.3	9.2	21.3	18.1
Dept of the Interior, total Bureau of Land Management Bureau of Mines Bureau of Reclamation Geological Survey	269.8 2.1 49.3 5.2 134.2	324.1 4.8 56.2 7.7 159.3	339.7 5.3 59.2 10.7 164.3	349.8 7.4 60.4 7.4 165.9	566.9 .0 70.0 5.5 311.9	477.3 .0 .0 6.0 306.2	4.9	496.2 .0 NA 5.4 444.8	454.1 .0 NA 6.6 389.0	483.1 .0 NA 6.1 418.8	500.2 .0 NA 7.4 432.9
Minerals Management Service Nat'l Biological Svc National Park Service Office of the Secretary Office of Surface Mining	1.9 NA 20.1 .0	2.7 NA 27.5 .1	3.8 NA 31.1 .2	5.8 .0 37.5 .2	20.6 135.4 23.6 .0	20.0 125.8 19.2 .0	21.9 NA 19.7 .0	20.6 NA 25.5 .0	29.3 NA 29.2 .0	29.1 NA 29.2 .0	28.6 NA 31.3 .0
Reclamation & Enforcement US Fish & Wildlife Service	.7 56.4	1.0 64.8	.3 64.8	.5 64.8	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0
Department of Justice, total	11.1 1.8 .4	14.7 1.9 .9	15.0 2.5 .1	20.5 2.5	20.0 2.1 .1	17.7 3.2 .0	19.5 3.1 -	20.1 1.9	26.0 4.3 .0	29.4 4.0 .0	9.8 4.0 .0
ServiceOffice of Justice Programs	.4 8.5	.4 11.5	.4 12.0	.4 17.6	.4 17.4	.4 14.1	.2 16.1	.4 17.8	.0 21.7	.0 25.5	.0 5.8
Department of Labor, total	21.3 7.3 .1 5.7	24.0 7.5 .0 6.3	23.6 7.6 .0 5.4	13.4 1.5 .0 3.3	13.7 1.5 .0 2.9	16.6 1.5 .0 4.2	15.2 1.8 .0 2.6	10.4 1.3 .0 1.5	11.0 1.3 .0 2.2	10.3 1.3 .0 2.0	11.0 1.3 .0 1.3
Administration	2.5	2.6	3.1	2.5	3.3	4.4	6.6	5.5	4.6	5.0	5.3
Office of the Secretary Pension Benefit Guaranty Corp Pension & Welfare Benefits	3.3 .3	4.7 .4	4.1 .8	2.9 .7	3.1 .3	2.9 .1	1.8 .1	.1 .1	.1 .1	.1 .1	.1 .1
Administration	2.1	2.5	2.6	2.6	2.7	3.6	2.3	2.0	2.7	1.8	3.0
Department of State <sup>1</sup>	1.2	1.3	.7	.5	.4	.5	.9	1.0	.9	1.0	1.0
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	119.2 5.1 26.1 57.6 8.5	114.6 6.4 24.0 46.1 13.2	155.7 5.0 30.1 72.0 18.9	224.4 8.2 59.8 90.1 20.9	270.4 5.6 79.5 131.2 16.1	323.9 4.9 83.3 156.3 22.5		343.7 5.7 159.4 111.6 18.2	366.1 5.1 151.6 134.6 21.2	450.6 4.5 150.0 210.7 25.1	607.9 5.7 173.0 338.4 23.6
Federal Transit Admin Maritime Administration National Highway Traffic	.0 .9	.0 1.7	.0 1.8	10.9 1.7	7.8 1.7	10.9 2.5	5.6 .0	6.0 .0	7.4 .0	4.1 .0	4.1 .0
Safety Administration Office of the Secretary Research & Special Programs	16.9 1.7	21.4 .6	25.8 .7	31.6 .6	25.3 .6	39.7 .6	33.2 .0	36.4 .0	41.6 .0	50.4 .0	58.7 .0
Administration	2.4	1.4	1.4	.5	2.6	3.2	5.6	6.3	4.6	5.9	4.5
Dept of the Treasury, total Bureau of Engraving &	15.3	20.6	17.2	4.6	9.2	48.9	50.4	50.8	52.5	60.7	74.8
Printing Internal Revenue Service Off of Thrift Supervision US Customs Service United States Secret Service	1.4 13.1 .0 .4 .5	2.7 13.9 3.0 .5 .4	1.8 13.9 .8 .2	3.2 .0 .7 .1	1.6 6.1 .5 .5	1.3 45.8 .6 .7	1.5 47.5 .5 .5	1.6 47.9 .6 .4	2.6 47.9 .7 .8 .5	2.2 55.5 .8 1.7 .5	2.3 70.2 .9 .9
Department of Veterans Affairs	199.4	177.7	185.2	194.1	209.1	206.4	222.8	217.4	149.1	171.3	169.5
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### Table C-100a. Federal obligations for applied research, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Other agencies:											
Advisory Commission on Intergovernmental Relations Appalachian Regional Comm Consumer Product Safety Comm Environmental Protection Agcy Fed Communications Commission	1.5 .4 .4 241.6 1.3	1.7 .7 .9 261.9 1.4	1.7 1.9 .8 293.9 1.6	2.1 .9 .8 272.4 1.6	1.4 .9 .1 301.0 1.7	1.4 .9 .0 331.3 2.3	NA .9 .0 329.1 2.8	NA .9 .1 358.0 3.1	NA .7 .0 419.8 3.0	NA .7 .0 387.2 4.2	NA .8 1.2 368.1 2.7
Federal Trade Commission General Services Admin International Development	.5 .7	1.0	1.3	.9 .0	.7 .0	.6 .0	.5 .0	.7 .0	1.1	1.1	1.4
Cooperation Agency, total Agcy for International Development <sup>2</sup> Library of Congress	300.2 300.2 1.2	351.7 351.7 1.3	294.2 294.2 1.4	350.8 350.8 1.4	214.4 214.4 1.5	270.4 270.4 1.6	203.0 203.0 1.6	176.5 176.5 .5	171.1 171.1 .5	163.2 163.2 .6	143.5 143.5 .6
Nat'l Aero & Space Admin	1,423.8 .1 103.3 108.8 4.1	1,665.6 .3 109.0 108.8 NA	1,491.1 .1 126.9 119.0 NA	1,748.6 .1 138.1 119.8 NA	1,876.7 .1 169.7 90.7 NA	2,067.9 .1 176.0 88.2 NA	1,897.1 .1 181.0 70.9 NA	2,090.1 .1 191.8 62.1 NA	2,389.9 .1 170.7 51.7 NA	2,310.6 .1 180.2 49.2 NA	1,943.2 .1 184.5 46.6 NA
Social Security Admin Tennessee Valley Authority United States Arms Control &	NA 17.0	NA 16.9	NA 22.2	NA 18.1	NA 17.0	NA 17.4	11.5 3.9	13.6 4.0	17.4 .8	53.7 .0	36.9 .0
Disarmament Agency <sup>1</sup> US Information AgencyUS Internat'l Trade Comm	.2 .5 9.1	.4 .1 9.9	2.1 .0 12.3	1.5 1.1 12.2	1.3 .6 9.4	1.1 .3 12.2	.7 .1 3.2	1.2 .2 5.7	1.2 .3 7.2	.1 .1 6.9	.0 .1 7.1

Effective April 1, 1999, all functions and authorities of the United States Arms Control & Disarmament Agency were transferred to the Department of State.

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

**KEY:** - = Amount less than 50 thousand dollars

NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

## Table C-101. Federal obligations for development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Pa	age 1 of 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all agencies	17,610.1	18,233.1	20,891.1	23,410.4	24,458.0	27,246.1	32,226.1	34,910.2	37,313.2	38,119.3	40,641.0
Departments:											
Dept of Agriculture, total Agricultural Marketing Svc Agricultural Research Svc Forest Service Grain Inspection Packers &	31.1 .5 NA 5.0	30.2 .3 NA 5.5	33.0 .2 26.2 6.2	30.8 .2 25.8 4.5	30.0 .3 25.5 3.8	31.3 .3 27.0 3.3	32.0 .3 27.7 3.3	32.1 .3 27.4 3.6	29.0 .3 24.0 3.8	31.4 .3 26.3 4.0	36.1 .3 31.4 3.9
Stockyards Administration	.0	.0	.0	.0	.0	.0	.2	.3	.5	.4	.3
Office of International Cooperation & Development Office of Transportation Science & Ed Admin, total Agricultural Research Svc	.0 .7 24.9 24.9	.4 .8 23.3 23.3	.3 .1 NA NA	.2 .1 NA NA	.4 .1 NA NA	.7 .1 NA NA	.4 .2 NA NA	.3 .1 NA NA	.3 .1 NA NA	.2 .1 NA NA	.1 NA NA NA
Department of Commerce, total Bureau of the Census Economic Development Admin Maritime Administration National Institute of	89.9 1.2 34.6 7.4	88.1 1.2 29.8 7.3	78.6 .9 26.3 NA	60.2 1.9 8.0 NA	50.2 2.1 .0 NA	61.5 2.1 .0 NA	74.6 2.4 11.0 NA	59.7 2.1 8.0 NA	63.7 1.9 .0 NA	46.6 1.9 .0 NA	46.9 2.0 .0 NA
Standards & Technology	16.0	17.3	16.3	14.9	13.6	11.8	14.0	11.6	9.3	9.1	10.0
National Oceanic & Atmospheric Administration National Telecommunications &	28.5	30.9	32.9	33.5	33.1	46.6	45.4	37.2	51.7	34.8	34.1
Information Administration Office of the Secretary Patent & Trademark Office	1.7 .0 .5	1.1 - .5	1.1 .0 1.1	1.2 .0 .7	1.4 - .0	.9 .1 .0	1.2 .6 .0	.8 .0 .0	.8 .0 .0	.8 .0 .0	.9 .0 .0
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy Defense Agencies	10,492.1 4,033.4 2,320.1 3,767.7 341.7	11,719.2 4,673.7 2,500.7 4,095.0 411.9	13,907.7 6,351.9 2,707.7 4,308.0 499.1	17,669.8 8,724.0 3,121.3 5,066.4 717.1	19,770.1 10,124.2 3,304.5 5,241.2 1,038.7	22,324.3 11,351.5 3,516.8 6,840.2 557.3		29,710.7 12,834.8 3,982.1 8,865.9 3,910.7	31,884.0 14,562.9 4,109.6 8,721.1 4,353.5	32,009.7 14,094.2 4,052.3 8,766.2 4,868.4	33,920.8 14,430.0 4,835.9 8,882.9 5,616.8
Operational Test & Evaluation, Director Test & Evaluation, Deputy	NA	NA	NA	NA	NA	NA	NA	.0	8.4	68.2	14.4
Under Secretary of Defense	29.3	37.9	41.1	41.0	61.6	58.6	50.6	117.1	128.5	160.3	140.7
Department of Education	72.9	51.8	51.1	57.5	35.6	34.8	33.0	25.5	25.6	29.7	37.2
Department of Energy	3,506.9	3,476.4	3,504.6	3,012.1	2,575.6	2,648.7	2,825.0	2,648.0	2,659.4	2,801.0	2,760.9

## Table C-101. Federal obligations for development, by agency: fiscal years 1979-1989

### [Dollars in millions]

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										Гс	ige 2 01 3
Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Department of Health & Human Services, total Alcohol, Drug Abuse, & Mental	489.2	447.4	434.9	335.2	331.7	364.7	422.7	468.0	584.3	661.1	814.4
Health Administration HIth Resources & Svcs Admin Health Services Admin Human Development Services	.7 NA 18.5 42.2	.0 NA 18.7 30.1	1.8 NA 10.1 33.8	2.1 3.4 NA 18.5	1.8 2.3 NA 16.6	1.2 2.3 NA 13.8	1.1 1.5 NA 18.5	1.2 .0 NA 47.8	2.2 .0 NA 43.6	2.4 .0 NA 46.8	3.0 .0 NA 93.2
National Insts of Health Office of the Assistant	423.0	394.4	384.9	308.7	311.0	347.0	399.6	417.5	536.2	610.2	716.5
Secretary for HealthOffice of the Secretary	4.7 .0	4.2 .0	4.3 .0	2.2 .3	.0 .0	.0 .4	1.7 .2	1.5 .0	2.3 .0	1.6 .0	1.7 .0
Dept of Housing & Urban Dvlpmt	44.1	36.4	31.4	18.5	20.8	11.9	12.0	10.1	10.8	12.1	11.9
Dept of the Interior, total Bonneville Power Admin Bureau of Land Management Bureau of Mines Bureau of Reclamation	66.3 .0 .2 41.9 .8	56.8 .0 .3 30.6 1.2	57.3 7.7 .4 28.7 .9	29.6 NA 2.9 13.6 1.1	24.8 NA 1.9 9.2 1.2	30.7 NA 2.0 11.6 1.4	22.4 NA 1.6 3.3 2.0	17.3 NA 1.3 2.8 .5	21.7 NA 1.6 3.6 .5	24.3 NA 1.5 5.2 .7	27.1 NA 1.0 5.4 .6
Geological Survey Office of the Secretary Office of Water Rsch & Tech US Fish & Wildlife Service	.5 .0 9.4 13.5	.5 .0 10.9 13.4	.5 .0 5.3 13.7	.5 .0 1.3 10.3	2.3 .0 1.0 9.2	4.9 .0 .0 10.8	4.4 .0 NA 11.1	7.4 .0 NA 5.3	10.3 .0 NA 5.7	10.9 .3 NA 5.7	12.9 .4 NA 6.7
Department of Justice, total	14.1 2.9 1.7 3.1	12.7 1.3 1.9 1.4	7.0 .9 .9 .7	10.4 .7 1.9 2.7	10.7 .4 1.6 2.5	6.6 .4 1.2 1.0	16.7 .4 1.1 9.5	14.1 .3 1.7 7.2	22.5 4.9 1.5 8.0	25.7 3.9 1.9 12.7	20.6 3.0 2.2 7.7
Service	.1	.2	.1	.4	.3	.3	.2	.2	.2	.0	.0
Office of Justice Programs Office of Legal Policy	6.3	7.5 .5	4.4 .1	4.6	5.8 .1	3.8 .0	5.5 .0	4.7 .0	7.9 .0	7.1 .0	7.8 .0
Department of Labor, total	94.9 94.9 .0 NA	101.6 101.6 .0 NA	4.0 3.6 .0 .4	8.3 7.4 .0 .8	1.9 1.1 .0 .8	.0 .0 .0	.9 .0 .9	.9 .0 .9	1.2 .3 .9 .0	8.9 8.0 .9 .0	13.3 9.7 3.6 .0
Department of State, total Departmental Funds	.5 .5	.3 .3	.2 .2	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0	.0 .0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

### Table C-101. Federal obligations for development, by agency: fiscal years 1979-1989

#### [Dollars in millions]

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Selected agency	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dept of Transportation, total Coast Guard Federal Aviation Admin Federal Highway Admin Federal Railroad Admin	303.1 10.2 103.0 48.5 36.7	278.8 9.9 94.9 46.5 38.3	327.0 11.3 111.8 46.1 30.4	243.4 18.3 87.3 35.0 15.1	275.1 18.4 113.7 43.1 13.7	370.6 12.2 251.2 40.3 6.9	357.6 13.6 269.0 42.6 3.6	317.3 13.4 246.6 30.8 2.9	256.2 13.3 156.2 56.0	213.4 15.7 147.3 30.4 1.8	182.9 13.3 123.2 34.4 1.5
Federal Transit Admin Maritime Administration National Highway Traffic	56.9 NA	45.5 NA	68.9 4.7	42.0 4.5	38.6 8.8	19.1 1.3	9.7 5.9	8.2 2.6	12.6 2.5	2.3 .0	1.4 .0
Safety Administration Office of the Secretary	26.6 11.1	24.9 10.2	36.5 9.4	34.1 3.0	30.6 4.6	32.2 4.0	7.2 3.9	6.3 4.7	9.0 4.1	9.2 5.0	3.5 4.2
Administration	10.0	8.5	7.9	4.0	3.6	3.5	2.2	1.7	1.8	1.7	1.3
Dept of the Treasury, total	4.8	6.3	6.1	5.2	5.4	3.3	6.0	6.3	9.5	10.2	9.3
FirearmsBureau of Engraving &	1.9	1.2	.2	NA	NA	NA	NA	NA	NA	NA	NA
Printing Internal Revenue Service US Customs Service	1.5 .1 1.3	1.0 .1 3.7	1.8 - 3.4	2.0 .1 3.1	1.9 .1 3.3	1.3 .2 1.7	1.6 1.3 2.1	1.1 .2 4.6	1.7 .4 6.8	.8 .7 8.5	.3 .3 6.4
United States MintUnited States Secret Service	.0 NA	.0 .4	.0 .6	.0 .0	.0	.0 .1	.6 .5	.3	.2 .3	.1 .0	2.0 .2
Department of Veterans Affairs	15.6	15.5	16.7	14.3	15.3	18.4	17.5	16.3	19.2	19.2	21.0
Other agencies:											
ACTION Appalachian Regional Comm Community Services Admin Consumer Product Safety Comm Environmental Protection Agcy	1.6 .2 18.9 2.1 151.1	.0 .2 29.1 1.9 99.9	.0 .1 16.4 .3 107.4	.0 .1 NA .1 91.7	.0 .0 NA .2 66.1	.0 .1 NA .2 89.2	.0 .0 NA 1.0 105.8	.0 .0 NA .9 99.5	.0 .0 NA 1.6 71.0	.0 .0 NA .9 79.5	.0 .0 NA .8 107.0
Federal Emergency Management Agency, total General Services Admin International Development	2.9 .3	2.5 .1	2.5 .2	.0 .5	.0 .3	5.4 2.0	1.2 .0	.0 .3	.0 .0	.0 .0	.0 .0
Cooperation Agency, total Agcy for Internat'l Dvlpmt Library of Congress	39.6 39.6 5.3	69.7 69.7 6.3	47.8 47.8 4.0	72.0 72.0 4.9	70.6 70.6 6.0	70.3 70.3 5.4	60.5 60.5 5.0	66.2 66.2 5.0	63.5 63.5 5.0	69.3 69.3 5.5	60.0 60.0 6.4
Nat'l Aero & Space Admin Nat'l Archives & Records	2,127.2	1,624.4	2,186.0	1,670.7	1,116.8	1,112.7	1,543.6	1,350.8	1,517.8	1,998.8	2,514.7
Administration  National Science Foundation  Office of Personnel Management  Tennessee Valley Authority	NA 7.9 4.6 21.9	NA 8.1 4.2 64.3	NA 6.1 5.0 54.7	NA 2.2 .0 72.3	NA .0 .0 50.7	NA .0 .0 53.8	.3 .0 .0 65.1	1.0 .0 .0 59.8	.4 .0 .0 60.2	.2 .0 .0 68.8	.1 .0 .0 48.0
United States Arms Control & Disarmament Agency US Information Agency	.8	.8 -	.8 .3	.6 .1	.1 .0	.2 .0	.0 .0	.1 .4	3.2 3.5	2.6 .3	1.6 .1

NOTES: Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

# Table C-101a. Federal obligations for development, by agency: fiscal years 1990-2000

## [Dollars in millions]

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										P8	age 1 of 3
Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all agencies	41,937.1	37,326.8	41,102.0	40,423.5	39,824.2	39,752.4	39,393.3	40,461.5	40,981.0	41,529.6	40,424.8
Departments:											
Dept of Agriculture, total	47.1 .4	61.2 .5	66.1 .6	76.1 .6	77.4 .6	81.4 .6	80.3 .6	98.5 .6	107.1 .7	120.8 .7	123.5 .7
Agricultural Research Svc Animal & Plant Health	33.3	40.2	43.9	52.8	54.3	54.7	54.0	61.9	68.2	75.0	77.0
Inspection Service Food Safety Inspection Svc	8.0 .0	15.7 .0	16.7 .0	17.1 .0	19.2 .0	19.1 .0	18.0	19.8	20.5 .1	20.0 .1	20.0 .1
Foreign Agricultural SvcForest Service	.0 4.8	.0 4.5	.0 4.9	.0 5.5	.0 3.3	.0 5.8	.0 5.6	.0 13.9	.0 15.5	.0 22.9	.0 22.9
Grain Inspection Packers & Stockyards Administration Office of International	.4	.1	.0	.0	.0	1.2	2.0	2.2	2.2	2.2	2.7
Cooperation & Development	.2	.2	.0	.0	.0	NA	NA	NA	NA	NA	NA
Department of Commerce, total Bureau of the Census	61.2 2.0	39.9 1.9	55.3 2.0	74.2 2.1	107.8 2.0	243.7 1.9	216.9 3.8	195.1 1.7	141.6 3.4	162.6 6.5	166.2 3.3
National Institute of Standards & Technology	10.5	15.6	29.6	34.3	45.9	191.2	161.6	128.9	89.0	113.8	119.6
National Oceanic & Atmospheric Administration National Telecommunications &	47.7	22.4	23.7	37.8	59.9	50.6	47.7	40.5	27.4	22.1	23.3
Information Administration	.9	.0	.0	.0	.0	.0	3.8	24.0	21.8	20.3	20.1
Department of Defense, total Department of the Air Force Department of the Army Department of the Navy	33,738.9 14,055.1 4,903.8 8,778.6	28,416.9 10,107.1 5,221.0 6,932.0	32,056.1 12,636.6 5,921.5 7,138.0	31,065.7 11,747.5 5,190.5 8,106.8	30,312.6 11,713.1 4,721.5 8,081.9	29,597.9 10,963.4 4,567.2 8,083.3	30,539.9 12,159.8 4,203.2 7,712.9	30,978.4 13,135.0 4,111.1 7,329.8	31,316.3 13,102.2 4,219.9 7,334.1	31,495.0 12,771.1 4,303.0 7,809.4	30,325.0 13,636.9 3,729.3 7,312.4
Operational Test & Evaluation, Director	32.6	13.6	12.4	12.3	11.2	21.7	21.9	26.6	30.3	31.8	25.4
Test & Evaluation, Deputy Under Secretary of Defense	188.7	223.7	233.2	242.5	231.8	231.0	257.7	269.7	242.0	236.6	253.1
Department of Education	39.7	39.4	41.5	44.1	39.9	39.3	38.2	43.2	55.7	67.9	99.2
Department of Energy	3,060.1	2,709.5	2,759.7	2,821.9	2,765.5	2,685.0	1,982.8	2,035.8	2,086.3	2,369.0	2,145.0
Department of Health & Human Services, total Administration on Aging	938.5 NA	1,593.5 17.7	1,042.3 17.8	1,156.6 18.2	1,285.1 15.6	1,379.3 17.7	1,405.2 3.5	1,557.2 4.3	1,685.8 8.0	1,932.3 17.3	2,047.2 17.3
Administration for Children & Families	NA	115.5	4.8	1.4	.9	.8	.0	.0	.0	.0	.0
Agency for Health Care Policy & Research	5.5	8.1	8.5	9.2	12.4	11.3	9.2	9.9	7.7	10.1	9.0
Alcohol, Drug Abuse, & Mental Health Administration	41.5	537.6	NA								
Hlth Resources & Svcs Admin Human Development Services National Insts of Health	.0 87.7 800.7	.0 NA 912.5	.0 NA 1,010.5	.0 NA 1,126.6	5.8 NA 1,249.6	1.0 NA 1,348.2	.0 NA 1,374.1	.0 NA 1,473.3	.0 NA 1,591.0	.0 NA 1,825.2	.0 NA 1,936.4
Office of the Assistant Secretary for Health	1.1	.4	.7	1.2	.8	.3	NA	NA	NA	NA	NA
Office of the Secretary, total	.0	.0	.0	.0	.0	.0	1.7	.6	3.1	3.7	4.5
Office of Public Health &											
Science Social Security Admin Substance Abuse & Mental	NA 2.1	NA 1.7	NA .0	NA .0	NA .0	NA .0	1.7 NA	.6 NA	3.1 NA	3.7 NA	4.5 NA
Health Services Admin <sup>1</sup>	NA	NA	NA	NA	NA	NA	16.7	69.1	76.0	76.0	80.0

See explanatory information, if any, and SOURCE at end of table.

# Table C-101a. Federal obligations for development, by agency: fiscal years 1990-2000

## [Dollars in millions]

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Dept of the Interior, total											Pa	ige 2 or 3
Dept of Housing & Urban Dvlpmt	Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
Dept of the Interior, total											1999	2000
Bureau of Land Management   7	Dept of Housing & Urban Dvlpmt	12.7	18.4	16.3	15.5	25.9	27.7	22.0	22.2	18.8	38.1	32.6
Office of the Secretary	Bureau of Land Management Bureau of Mines Bureau of Reclamation	.7 9.4 .5	2.8 7.1 .9	.4 4.2 2.5	.9 6.9 2.8	.0 12.5 1.8	.0 .0 2.0	.0 NA 1.6	.0 NA 1.7	.0 NA 2.2	.0 NA 2.0	32.6 .0 NA 2.5 30.1
Bureau of Prisons	Office of the Secretary	.2	.5	.7	.2	.1	-	.0	.0	.0	.0	NA .0 .0
Office of Justice Programs         7.7         11.9         12.1         7.5         8.1         18.3         8.5         14.0         19.0         20.1         16.1           Department of Labor, total         51.4         19.7         27.9         36.1         40.1         25.5         25.8         13.3         5.7         5.3         3.8           Employment & Training Admin         47.4         15.5         26.1         32.5         36.9         21.4         24.3         12.6         50         4.6         3.0           Office of the Secretary         3.8         4.0         1.7         3.0         2.2         3.4         8         1	Bureau of Prisons  Drug Enforcement Admin  Fed Bureau of Investigation	2.7 2.0	3.3 1.8	3.4 1.3	3.6 .8	3.3 .8	2.5 .4	2.2 1.2	2.7	3.8 .0	3.9	56.8 4.0 .0 36.2
Employment & Training Admin         47.4         15.5         26.1         32.5         36.9         21.4         24.3         12.6         5.0         4.6         3.0           Office of the Secretary         3.8         4.0         1.7         3.0         2.2         3.4         8         1												
Coast Guard         15.2         19.2         15.0         24.7         16.7         14.8         15.0         17.2         15.3         13.5         17.0           Federal Aviation Admin         189.9         196.2         206.1         189.1         206.1         205.1         77.7         49.7         76.4         61.3         60.7           Federal Highway Admin         33.8         40.8         57.0         83.1         101.5         109.4         66.1         61.1         57.7         105.0         153.6           Federal Railroad Admin         1.7         2.7         3.9         4.3         3.4         4.0         5.4         .7         .3         .3         .3         .3           Federal Transit Admin         1.6         1.7         1.7         13.3         12.1         17.9         8.1         11.1         10.2         18.1         15.1           Office of the Secretary         5.1         3.7         3.4         3.9         4.9         3.3         2.8         3.5         3.4         9.6         4.5           Research & Special Programs         Administration         .0         1.0         1.1         .8         2.7         1.8         2.1         2.4 <td>Employment &amp; Training Admin Office of the Secretary</td> <td>47.4 3.8</td> <td>15.5 4.0</td> <td>26.1 1.7</td> <td>32.5 3.0</td> <td>36.9 2.2</td> <td>21.4 3.4</td> <td>24.3 .8</td> <td>12.6 .1</td> <td>5.0 .1</td> <td>4.6 .1</td> <td>3.8 3.0 .1 .6</td>	Employment & Training Admin Office of the Secretary	47.4 3.8	15.5 4.0	26.1 1.7	32.5 3.0	36.9 2.2	21.4 3.4	24.3 .8	12.6 .1	5.0 .1	4.6 .1	3.8 3.0 .1 .6
Office of the Secretary         5.1         3.7         3.4         3.9         4.9         3.3         2.8         3.5         3.4         9.6         4.5           Research & Special Programs         .0         1.0         1.1         .8         2.7         1.8         2.1         2.4         1.7         3.8         3.1           Dept of the Treasury, total         6.9         6.7         3.8         5.5         9.8         12.4         9.5         8.8         12.5         11.3         11.4           Bureau of Engraving & Printing         .7         .8         .2         .0         .1         .5         .1	Coast GuardFederal Aviation AdminFederal Highway Admin	15.2 189.9 33.8	19.2 196.2 40.8	15.0 206.1 57.0	24.7 189.1 83.1	16.7 206.1 101.5	14.8 205.1 109.4	15.0 77.7 66.1	17.2 49.7 61.1	15.3 76.4 57.7	13.5 61.3 105.0	254.2 17.0 60.7 153.6 .3
Administration       .0       1.0       1.1       .8       2.7       1.8       2.1       2.4       1.7       3.8       3.1         Dept of the Treasury, total       6.9       6.7       3.8       5.5       9.8       12.4       9.5       8.8       12.5       11.3       11.4         Bureau of Engraving & Printing       .7       8       .2       .0       .1       .5       .1 <td< td=""><td>Office of the Secretary</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>15.1 4.5</td></td<>	Office of the Secretary											15.1 4.5
Bureau of Engraving & Printing       .7       .8       .2       .0       .1       .5       .1		.0	1.0	1.1	.8	2.7	1.8	2.1	2.4	1.7	3.8	3.1
Financial Crimes Enforcement	Bureau of Engraving &								8.8	_		11.4
Internal Revenue Service	Financial Crimes Enforcement				-							
Department of Veterans Affairs 22.1 22.8 23.0 28.7 24.5 19.1 20.8 21.7 8.0 9.3 9.0	Internal Revenue ServiceUS Customs Service	.3 5.8	.4 3.2	.4 2.0	.0 3.9	5.2 4.0	3.9 7.7	3.7 5.7	3.0	4.1 8.3	3.3 7.2	.0 3.4 7.4 .5
	Department of Veterans Affairs	22.1	22.8	23.0	28.7	24.5	19.1	20.8	21.7	8.0	9.3	9.0

See explanatory information, if any, and SOURCE at end of table.  $\label{eq:source}$ 

### Table C-101a. Federal obligations for development, by agency: fiscal years 1990-2000

#### [Dollars in millions]

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Selected agency	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Other agencies:											
Consumer Product Safety Comm	.7	.4	.3	.4	.2	.4	_	.0	.0	.1	.1
Environmental Protection Agcy International Development	104.5	79.5	79.6	133.7	151.2	149.9	83.5	83.1	94.0	93.0	88.0
Cooperation Agency, total	29.3	20.4	65.9	23.0	38.1	29.8	18.0	29.7	39.1	46.0	50.5
Development <sup>2</sup>	29.3	20.4	65.9	23.0	38.1	29.8	18.0	29.7	39.1	46.0	50.5
Library of Congress	7.0	7.3	8.5	8.7	8.1	8.0	8.4	1.9	1.1	1.5	1.2
Nat'l Aero & Space Admin	3,472.6	3,909.1	4,428.3	4,471.1	4,455.7	4,968.9	4,692.1	5,142.4	5,154.4	4,874.9	4,978.3
Nat'l Archives & Records Admin Tennessee Valley Authority	.1 43.2	.1 49.5	.1 72.9	80.6	.0 71.9	.0 66.7	.0 1.9	.0 4.9	.0 1.8	.0 .0	.0 .0
Tennessee Valley Authority	43.2	49.5	12.9	00.0	71.9	66.7	1.9	4.9	1.0	.0	.0

Data for fiscal years 1998-2000 from the Substance Abuse and Mental Health Services Administration (SAMHSA) are estimates based on SAMHSA's obligations by program activity budget and previously reported funding for development.

**NOTES:** Because of rounding, detail may not add to totals.

Data for only those agencies that had obligations in the variables represented by this table appear in the table. For a complete list of the Federal agencies that have been included in the Federal funds survey, refer to appendix A. For additional notes associated with the agencies listed in this table, refer to appendix B.

Beginning with Vol. 44, Department of Defense development obligations are reported in two categories: advanced technology and major systems.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the agency or agency subdivision did not exist as such or in that organization in that year)

Since the experimental New Management System, which is an integrated system containing the Agency for International Development's (AID) budget and accounting records, does not contain codes for determining either fields of science and engineering or performer data, the National Science Foundation has estimated these data based on AID's Budget Authority (fiscal years 1998-2000) and AID's Federal funds survey submission to Vol. 44 (fiscal years 1994-1996). More accurate data for AID will be reported in future volumes of this survey.

# Table C-102. Federal obligations for research and development, by performer: fiscal years 1979-1989

#### [Dollars in millions]

Performer	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	28,145.1	29,830.4	33,103.9	36,432.6	38,711.5	42,224.9	48,359.6	51,412.4	55,253.7	56,769.4	61,406.5
Intramural <sup>1</sup>	7,417.5	7,632.3	8,425.7	9,141.0	10,581.9	11,572.3	12,945.4	13,534.9	13,413.1	14,114.6	15,024.6
Industrial firms excluding FFRDCs	12,172.4	12,969.1	14,867.9	17,192.2	17,019.7	18,610.4	21,704.9	24,201.2	26,768.2	26,719.2	28,547.9
FFRDCs administered by industrial firms	1,318.1	1,408.1	1,413.9	1,506.4	1,501.2	1,608.4	1,790.8	1,697.0	1,860.0	1,911.3	2,056.3
Universities & colleges excluding FFRDCs	3,888.8	4,263.4	4,465.8	4,605.5	4,966.4	5,546.9	6,339.7	6,558.8	7,337.3	7,827.7	8,672.0
FFRDCs administered by universities <sup>2</sup>	1,488.3	1,533.3	1,791.0	1,976.7	2,393.9	2,485.8	2,816.4	2,767.7	3,209.6	3,473.9	3,497.1
Nonprofit institutions excluding FFRDCs	1,026.5	1,105.6	1,068.8	1,091.7	1,241.6	1,497.3	1,699.2	1,677.0	1,711.4	1,683.2	1,999.9
FFRDCs administered by nonprofit institutions <sup>2</sup>	368.7	441.8	525.2	520.6	581.3	597.1	689.2	551.2	510.6	505.6	522.0
State and local governments	310.1	265.5	222.2	184.3	186.0	130.9	129.4	128.4	148.2	142.1	167.4
Foreign	154.7	211.2	323.4	214.3	239.5	175.8	244.5	296.3	295.3	391.8	919.4

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

# Table C-102a. Federal obligations for research and development, by performer: fiscal years 1990-2000

#### [Dollars in millions]

Performer	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total	63,559.5	61,295.2	65,592.6	67,314.0	67,235.4	68,186.8	67,653.0	69,826.8	71,903.3	75,351.3	75,104.3
Intramural <sup>1</sup>	15,848.9	15,138.2	15,582.8	16,663.3	16,132.1	17,024.8	16,540.4	16,718.2	17,114.0	18,271.6	17,641.7
Industrial firms excluding FFRDCs	29,370.0	26,420.6	29,744.8	30,219.0	30,454.9	30,236.1	30,373.8	31,419.3	31,839.7	31,906.1	31,640.0
FFRDCs administered by industrial firms	2,326.8	2,168.3	2,117.0	1,451.3	1,293.5	1,201.8	1,137.0	1,128.2	1,188.9	1,294.6	1,337.0
Universities & colleges excluding FFRDCs	9,137.5	10,168.5	10,271.2	11,208.4	11,796.9	11,927.5	11,977.8	12,559.0	13,365.9	14,981.6	15,191.3
FFRDCs administered by universities	3,449.8	3,603.8	3,855.5	3,614.2	3,292.9	3,561.6	3,447.1	3,701.0	3,890.1	4,108.0	4,470.7
Nonprofit institutions excluding FFRDCs	2,248.2	2,637.4	2,803.6	2,811.9	2,936.9	2,834.1	2,886.8	2,961.6	3,155.1	3,477.4	3,472.9
FFRDCs administered by nonprofit institutions	621.6	679.4	745.6	753.4	736.0	825.1	755.2	821.0	603.0	656.4	670.5
State and local governments	213.9	215.1	184.1	320.3	325.4	316.5	246.7	261.1	447.5	414.1	420.1
Foreign	342.6	263.9	287.9	272.2	266.8	259.2	288.3	257.5	299.1	241.6	260.3

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

# Table C-103. Federal obligations for research, by performer: fiscal years 1979-1989

#### [Dollars in millions]

Performer	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1	20,765.5
Intramural <sup>1</sup>	3,481.2	3,666.3	4,034.2	4,194.2	4,710.3	4,764.7	5,056.1	5,160.3	5,437.7	5,338.4	5,897.0
Industrial firms excluding FFRDCs	1,762.0	2,077.6	1,958.3	2,156.6	2,114.2	2,137.4	2,074.4	2,280.5	2,448.6	2,642.5	2,875.0
FFRDCs administered by industrial firms	245.0	311.0	351.3	487.3	522.6	496.5	485.9	482.1	433.5	455.2	604.3
Universities & colleges excluding FFRDCs	3,333.4	3,699.1	3,920.1	4,045.4	4,467.9	5,029.7	5,726.3	5,883.4	6,640.2	7,022.9	7,793.1
FFRDCs administered by universities <sup>2</sup>	800.6	851.2	940.6	1,056.7	1,250.1	1,335.9	1,421.3	1,291.7	1,471.0	1,564.8	1,703.4
Nonprofit institutions excluding FFRDCs	622.6	678.4	705.2	743.5	836.9	922.6	1,045.1	1,062.9	1,207.5	1,300.0	1,519.8
FFRDCs administered by nonprofit institutions <sup>2</sup>	73.4	71.7	67.7	104.2	85.2	87.3	97.0	87.9	89.8	82.9	109.5
State and local governments	139.5	150.9	129.3	125.9	136.7	88.2	89.5	91.0	90.2	103.1	121.2
Foreign	77.4	91.1	106.0	108.3	129.6	116.5	137.9	162.4	121.9	140.4	142.1

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

## Table C-103a. Federal obligations for research, by performer: fiscal years 1990-2000

#### [Dollars in millions]

Performer	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.3	30,922.3	33,821.7	34,679.6
Intramural <sup>1</sup>	5,809.8	6,454.4	6,523.3	7,451.8	7,481.1	7,684.5	7,513.2	7,666.9	7,964.7	8,440.1	8,775.7
Industrial firms excluding FFRDCs	3,191.6	3,406.5	3,451.2	3,923.8	4,063.9	4,698.7	4,269.1	4,392.1	4,635.1	4,907.0	4,709.6
FFRDCs administered by industrial firms	614.3	709.6	684.9	799.3	737.2	811.6	696.2	759.6	844.1	896.4	947.7
Universities & colleges excluding FFRDCs	8,136.5	8,867.5	9,060.7	9,892.3	10,291.7	10,353.8	10,706.6	11,173.2	11,741.0	13,191.7	13,421.8
FFRDCs administered by universities	1,791.5	2,160.9	2,351.8	2,299.4	2,181.1	2,233.6	2,385.0	2,598.9	2,743.0	2,962.3	3,372.8
Nonprofit institutions excluding FFRDCs	1,660.0	1,925.9	2,049.6	2,041.3	2,102.1	2,078.7	2,178.9	2,294.9	2,425.2	2,729.8	2,761.6
FFRDCs administered by nonprofit institutions	137.6	170.9	139.9	173.4	178.4	207.2	195.5	217.5	214.5	245.5	222.8
State and local governments	126.4	129.3	109.3	211.8	230.8	221.4	187.4	144.0	240.1	329.8	345.5
Foreign	154.5	143.4	120.0	97.4	144.8	144.8	127.8	118.2	114.5	119.0	122.0

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

# Table C-104. Federal obligations for basic research, by performer: fiscal years 1979-1989

#### [Dollars in millions]

Performer	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6	10,602.0
Intramural <sup>1</sup>	1,089.1	1,182.5	1,301.8	1,465.5	1,689.8	1,861.1	1,923.4	2,018.9	2,046.2	2,050.3	2,313.4
Industrial firms excluding FFRDCs	277.1	325.3	292.9	270.9	292.9	377.9	380.1	511.6	467.0	596.9	773.2
FFRDCs administered by industrial firms	66.6	70.4	73.3	87.4	83.0	91.1	122.6	117.6	119.9	133.0	223.9
Universities & colleges excluding FFRDCs	2,079.9	2,320.3	2,503.2	2,727.1	3,112.3	3,530.8	4,038.7	4,132.1	4,665.6	4,868.3	5,221.4
FFRDCs administered by universities <sup>2</sup>	393.6	436.8	490.6	516.7	604.0	668.9	724.2	724.1	906.7	989.8	1,098.1
Nonprofit institutions excluding FFRDCs	240.3	279.5	313.1	355.6	409.6	473.6	555.8	572.1	657.7	728.6	838.9
FFRDCs administered by nonprofit institutions <sup>2</sup>	6.7	7.5	8.6	9.0	8.0	8.2	12.4	13.0	13.3	17.7	42.2
State and local governments	19.8	23.9	26.5	24.5	32.1	28.1	30.5	30.9	37.5	42.7	43.6
Foreign	19.5	28.1	31.2	24.9	28.5	27.7	30.9	32.7	28.5	46.3	47.4

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

## Table C-104a. Federal obligations for basic research, by performer: fiscal years 1990-2000

#### [Dollars in millions]

Performer	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,941.9	15,613.0	17,366.9	18,209.4
Intramural <sup>1</sup>	2,294.6	2,391.6	2,337.6	2,661.8	2,497.8	2,693.5	2,676.7	2,688.3	2,917.8	3,107.5	3,336.2
Industrial firms excluding FFRDCs	887.5	949.9	920.3	896.3	1,109.6	1,214.2	1,108.8	1,166.7	1,119.7	1,292.5	1,439.6
FFRDCs administered by industrial firms	246.8	264.0	247.2	243.6	237.6	239.8	272.8	294.7	326.4	336.9	338.8
Universities & colleges excluding FFRDCs	5,548.2	6,064.5	6,331.8	6,833.7	6,992.3	6,943.9	7,443.5	7,695.8	7,952.2	8,931.6	9,226.9
FFRDCs administered by universities	1,227.3	1,306.2	1,394.1	1,402.7	1,336.0	1,438.8	1,521.0	1,600.0	1,642.3	1,807.2	1,969.4
Nonprofit institutions excluding FFRDCs	924.1	1,015.5	1,097.2	1,164.9	1,132.9	1,148.3	1,234.6	1,289.6	1,397.6	1,601.5	1,623.7
FFRDCs administered by nonprofit institutions	59.2	80.8	65.5	71.3	74.4	75.2	76.1	88.4	121.9	144.9	129.0
State and local governments	50.4	49.1	42.4	71.7	75.2	78.7	80.2	68.4	84.9	89.3	87.8
Foreign	47.6	49.1	53.8	53.3	67.6	44.6	50.5	49.9	50.4	55.6	58.0

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

# Table C-105. Federal obligations for applied research, by performer: fiscal years 1979-1989

#### [Dollars in millions]

Performer	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5
Intramural <sup>1</sup>	2,392.1	2,483.8	2,732.4	2,728.7	3,020.4	2,903.6	3,132.7	3,141.5	3,391.5	3,288.1	3,583.5
Industrial firms excluding FFRDCs	1,484.9	1,752.3	1,665.4	1,885.7	1,821.3	1,759.5	1,694.3	1,768.8	1,981.6	2,045.6	2,101.8
FFRDCs administered by industrial firms	178.3	240.7	278.1	400.0	439.7	405.4	363.3	364.5	313.6	322.2	380.5
Universities & colleges excluding FFRDCs	1,253.5	1,378.8	1,416.9	1,318.3	1,355.6	1,498.9	1,687.6	1,751.4	1,974.6	2,154.6	2,571.8
FFRDCs administered by universities 2	407.0	414.3	450.0	540.0	646.1	667.0	697.1	567.6	564.3	575.0	605.4
Nonprofit institutions excluding FFRDCs	382.3	398.9	392.1	387.9	427.3	449.0	489.3	490.8	549.8	571.3	681.0
FFRDCs administered by nonprofit institutions <sup>2</sup>	66.7	64.2	59.1	95.2	77.1	79.1	84.6	74.9	76.5	65.2	67.3
State and local governments	119.7	127.1	102.8	101.4	104.7	60.0	58.9	60.0	52.7	60.4	77.6
Foreign	57.9	63.0	74.8	83.4	101.1	88.8	107.0	129.7	93.4	94.1	94.6

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

## Table C-105a. Federal obligations for applied research, by performer: fiscal years 1990-2000

#### [Dollars in millions]

Performer	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,309.3	16,454.8	16,470.1
Intramural <sup>1</sup>	3,515.2	4,062.8	4,185.7	4,790.0	4,983.3	4,991.0	4,836.5	4,978.6	5,046.9	5,332.6	5,439.5
Industrial firms excluding FFRDCs	2,304.2	2,456.6	2,530.9	3,027.5	2,954.4	3,484.5	3,160.3	3,225.5	3,515.4	3,614.5	3,270.0
FFRDCs administered by industrial firms	367.5	445.6	437.6	555.6	499.6	571.8	423.4	464.9	517.7	559.5	608.8
Universities & colleges excluding FFRDCs	2,588.4	2,803.0	2,728.9	3,058.6	3,299.4	3,409.9	3,263.1	3,477.4	3,788.9	4,260.1	4,194.9
FFRDCs administered by universities	564.3	854.7	957.6	896.8	845.1	794.8	864.0	998.8	1,100.7	1,155.2	1,403.4
Nonprofit institutions excluding FFRDCs	735.9	910.4	952.5	876.4	969.2	930.4	944.3	1,005.3	1,027.7	1,128.4	1,137.9
FFRDCs administered by nonprofit institutions	78.4	90.1	74.5	102.2	104.0	132.0	119.4	129.2	92.6	100.7	93.8
State and local governments	76.1	80.2	66.9	140.1	155.5	142.7	107.3	75.5	155.2	240.5	257.8
Foreign	106.9	94.3	66.2	44.1	77.2	100.3	77.4	68.2	64.1	63.4	64.0

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

NOTE: Because of rounding, detail may not add to totals.

KEY: FFRDCs = Federally funded research and development centers

## Table C-106. Federal obligations for development, by performer: fiscal years 1979-1989

#### [Dollars in millions]

Performer	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	17,610.1	18,233.1	20,891.1	23,410.4	24,458.0	27,246.1	32,226.1	34,910.2	37,313.2	38,119.3	40,641.0
Intramural <sup>1</sup>	3,936.3	3,966.1	4,391.5	4,946.8	5,871.7	6,807.6	7,889.3	8,374.6	7,975.3	8,776.2	9,127.6
Industrial firms excluding FFRDCs	10,410.5	10,891.5	12,909.6	15,035.6	14,905.5	16,472.9	19,630.5	21,920.7	24,319.6	24,076.7	25,672.9
FFRDCs administered by industrial firms	1,073.1	1,097.0	1,062.6	1,019.1	978.5	1,112.0	1,304.9	1,215.0	1,426.4	1,456.1	1,452.0
Universities & colleges excluding FFRDCs	555.5	564.4	545.6	560.0	498.5	517.2	613.5	675.4	697.0	804.8	878.8
FFRDCs administered by universities <sup>2</sup>	687.7	682.2	850.4	920.0	1,143.8	1,149.9	1,395.1	1,476.0	1,738.6	1,909.1	1,793.6
Nonprofit institutions excluding FFRDCs	403.8	427.1	363.6	348.1	404.7	574.6	654.1	614.1	503.9	383.2	480.0
FFRDCs administered by nonprofit institutions 2	295.4	370.1	457.5	416.4	496.1	509.8	592.2	463.3	420.8	422.7	412.4
State and local governments	170.7	114.6	92.9	58.4	49.3	42.8	39.9	37.4	58.0	39.0	46.3
Foreign	77.3	120.1	217.5	106.0	109.9	59.2	106.7	133.9	173.4	251.4	777.3

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

In 1984 the Center for Naval Analyses was reclassified from an FFRDC administered by a university to an FFRDC administered by a nonprofit institution.

# Table C-106a. Federal obligations for development, by performer: fiscal years 1990-2000

#### [Dollars in millions]

Performer	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total	41,937.1	37,326.8	41,102.0	40,423.5	39,824.2	39,752.4	39,393.3	40,461.5	40,981.0	41,529.6	40,424.8
Intramural <sup>1</sup>	10,039.1	8,683.8	9,059.6	9,211.6	8,650.9	9,340.2	9,027.2	9,051.3	9,149.3	9,831.5	8,866.0
Industrial firms excluding FFRDCs	26,178.4	23,014.1	26,293.6	26,295.2	26,390.9	25,537.4	26,104.7	27,027.2	27,204.6	26,999.1	26,930.3
FFRDCs administered by industrial firms	1,712.5	1,458.7	1,432.2	652.1	556.3	390.2	440.7	368.6	344.7	398.2	389.3
Universities & colleges excluding FFRDCs	1,001.0	1,301.0	1,210.6	1,316.1	1,505.2	1,573.7	1,271.2	1,385.7	1,624.8	1,789.9	1,769.4
FFRDCs administered by universities	1,658.3	1,442.9	1,503.7	1,314.8	1,111.8	1,328.0	1,062.1	1,102.1	1,147.2	1,145.6	1,097.9
Nonprofit institutions excluding FFRDCs	588.2	711.5	753.9	770.6	834.8	755.4	707.9	666.7	729.9	747.5	711.3
FFRDCs administered by nonprofit institutions	484.0	508.5	605.7	580.0	557.6	617.9	559.7	603.4	388.5	410.8	447.8
State and local governments	87.5	85.8	74.8	108.5	94.7	95.1	59.3	117.1	207.4	84.3	74.5
Foreign	188.1	120.5	167.9	174.8	122.0	114.4	160.5	139.3	184.6	122.6	138.3

Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

**NOTE:** Because of rounding, detail may not add to totals.

**KEY:** FFRDCs = Federally funded research and development centers

## Table C-107. Federal obligations for total research, by detailed field of science and engineering: fiscal years 1979-1989

#### [Dollars in millions]

Field of science and engineering	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all fields	10,535.0	11,597.4	12,212.8	13,022.2	14,253.5	14,978.8	16,133.4	16,502.2	17,940.5	18,650.1	20,765.5
Life sciences, total Biol & agricultural, total Biol (excl environmental) Environmental biology Agricultural	3,848.3	4,192.3	4,435.6	4,745.5	5,177.9	5,635.9	6,362.5	6,464.3	7,341.4	7,724.5	8,495.1
	2,320.3	2,507.6	2,711.8	2,811.8	3,064.4	3,325.0	3,755.3	3,861.3	4,358.5	4,573.4	5,020.0
	1,702.2	1,830.6	1,996.6	2,079.3	2,305.5	2,563.1	2,885.7	2,993.4	3,502.0	3,681.7	3,983.2
	216.6	229.7	220.3	183.5	193.6	250.0	260.3	264.1	289.6	301.0	367.8
	401.5	447.2	494.8	549.0	565.2	512.0	609.3	603.8	566.9	590.7	669.0
Medical sciences, total	1,380.6	1,536.9	1,609.9	1,773.0	1,927.5	2,112.8	2,368.5	2,360.4	2,664.8	2,941.0	3,222.5
Life sciences, n.e.c.	147.3	147.9	113.9	160.7	186.1	198.1	238.7	242.6	318.2	210.1	252.6
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	197.4	199.0	208.9	218.4	240.9	266.7	327.1	334.0	369.5	389.8	421.7
	56.8	59.9	57.5	59.6	63.2	80.8	91.2	90.1	98.3	105.3	121.8
	83.6	94.8	93.5	98.1	104.7	107.8	142.9	143.5	154.5	149.4	149.9
	57.0	44.3	57.9	60.7	73.0	78.1	93.1	100.4	116.7	135.2	149.9
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	1,792.6	2,000.6	2,220.5	2,500.4	2,891.4	2,969.0	3,046.0	3,069.1	3,252.6	3,317.3	3,705.2
	284.4	285.7	281.0	275.8	357.4	382.3	414.7	468.2	522.2	470.8	541.9
	443.6	454.5	486.9	481.2	520.3	606.4	650.4	662.4	680.3	703.1	782.6
	1,022.7	1,182.5	1,345.6	1,610.5	1,854.6	1,836.4	1,816.0	1,805.9	1,853.6	1,975.3	2,190.8
	41.8	77.9	107.0	132.9	159.2	143.9	164.8	132.6	196.6	168.1	189.9
Environmental sciences, total Atmospheric sciences	1,101.0	1,261.0	1,121.1	1,148.3	1,251.2	1,275.9	1,403.7	1,481.7	1,511.6	1,607.0	1,773.2
	348.7	409.5	373.4	425.8	460.7	434.1	486.0	521.3	552.9	587.8	588.0
	358.7	401.8	396.1	357.6	333.5	359.0	429.0	443.9	441.7	441.6	542.8
	220.5	262.1	261.7	261.3	343.5	363.5	398.5	429.7	427.4	460.4	491.9
	173.1	187.6	89.9	103.6	113.5	119.3	90.2	86.8	89.5	117.1	150.5
Math & computer sci, total  Mathematics  Computer sciences  Math & computer sci, n.e.c	210.3	240.9	278.9	350.1	419.4	440.3	574.9	615.4	640.6	642.9	735.4
	84.2	90.9	117.7	128.1	133.5	151.0	183.6	184.5	204.5	217.9	236.1
	106.3	128.6	121.5	170.9	214.6	214.5	280.3	302.4	297.8	292.7	364.6
	19.9	21.4	39.7	51.0	71.4	74.8	111.0	128.5	138.3	132.3	134.8
Engineering, total Aeronautical Astronautical Chemical Civil	2,571.6	2,830.1	3,071.5	3,386.5	3,517.0	3,624.1	3,617.6	3,738.9	3,906.3	3,956.4	4,442.2
	624.9	708.1	709.6	741.2	820.6	860.4	738.0	775.6	810.4	801.8	986.8
	251.1	302.3	303.9	290.7	321.5	396.8	424.7	526.9	624.6	575.4	677.4
	114.3	96.3	147.6	95.1	145.0	144.5	254.3	245.8	215.8	258.1	142.2
	125.0	158.8	159.1	201.9	188.5	202.8	216.6	202.9	204.4	214.9	229.8
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	417.9	517.1	556.7	612.2	614.9	630.0	626.8	674.4	786.3	731.1	843.1
	195.9	208.0	204.6	201.2	266.4	190.5	267.0	236.5	233.5	240.8	257.4
	249.3	236.2	256.0	309.1	332.5	341.1	439.2	445.0	362.0	456.7	521.0
	593.2	603.3	733.9	935.1	827.6	858.0	651.0	631.7	669.3	677.8	784.5
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	527.3	523.8	497.4	385.9	435.3	436.3	460.0	415.5	480.0	485.8	551.0
	17.3	17.2	14.5	14.6	12.8	18.6	18.0	13.6	15.2	14.3	13.9
	181.9	192.8	206.7	157.1	165.6	147.3	159.7	131.3	148.5	159.5	166.8
	13.9	12.2	10.8	7.5	11.1	10.8	14.6	11.6	11.3	12.2	13.5
	64.5	71.4	65.0	52.0	67.8	70.2	66.5	67.0	74.0	81.8	94.1
	249.6	230.3	200.4	154.7	178.0	189.5	201.3	192.0	231.0	218.0	262.8
Other sciences, n.e.c.	286.6	349.6	378.8	287.0	320.4	330.5	341.6	383.3	438.3	526.5	641.6

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

## Table C-107a. Federal obligations for total research, by detailed field of science and engineering: fiscal years 1990-2000

#### [Dollars in millions]

Field of science and engineering	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all fields	21,622.4	23,968.4	24,490.6	26,890.5	27,411.2	28,434.4	28,259.8	29,365.3	30,922.3	33,821.7	34,679.6
Life sciences, total Biol & agricultural, total Biol (excl environmental) Environmental biology Agricultural	8,829.8	9,622.0	9,910.5	10,772.1	11,284.3	11,811.0	12,064.3	12,661.3	13,557.6	15,385.4	15,561.7
	5,178.4	5,597.9	5,633.6	6,059.3	6,103.0	6,402.5	6,629.9	6,544.0	7,073.8	NA	NA
	4,144.6	4,457.8	4,435.1	4,789.9	4,745.8	4,925.4	5,309.9	5,320.2	5,706.6	NA	NA
	342.3	459.7	511.0	556.5	629.9	806.9	704.0	582.5	604.5	NA	NA
	691.4	680.3	687.5	712.9	727.2	670.3	616.0	641.3	762.8	NA	NA
Medical sciencesLife sciences, n.e.c.	3,382.4	3,460.3	3,909.9	4,404.4	4,862.1	4,972.2	4,973.4	5,532.7	5,996.3	NA	NA
	269.1	563.8	367.0	308.3	319.3	436.3	461.1	584.6	487.4	NA	NA
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	448.6	482.4	298.1	550.7	548.4	622.6	525.0	545.4	591.0	661.7	686.1
	130.6	140.2	34.6	37.2	48.1	58.8	62.8	57.8	41.6	NA	NA
	177.5	197.5	100.9	134.7	116.8	156.3	83.4	96.7	97.5	NA	NA
	140.5	144.8	162.6	378.7	383.4	407.5	378.8	390.9	451.9	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	3,808.7	4,235.3	4,439.2	4,427.0	4,253.5	4,278.3	3,923.0	4,149.2	4,209.7	4,456.5	4,719.3
	597.2	631.7	739.1	686.3	747.6	764.5	729.0	774.7	732.2	NA	NA
	761.7	828.4	896.2	843.2	874.4	863.5	881.1	845.8	819.0	NA	NA
	2,254.9	2,460.9	2,578.2	2,638.4	2,443.1	2,451.2	1,991.3	2,067.6	2,131.8	NA	NA
	195.0	314.3	225.7	259.2	188.3	199.2	321.6	461.0	526.7	NA	NA
Environmental sciences, total Atmospheric sciences Geological sciences Oceanography Environmental sci, n.e.c.	2,174.1	2,149.8	2,207.6	2,608.5	2,838.2	2,854.4	3,019.7	3,045.7	3,062.0	3,171.1	3,209.0
	773.4	802.7	767.3	984.1	1,095.0	1,135.6	1,085.7	1,164.3	1,174.4	NA	NA
	661.1	728.7	735.7	797.9	838.0	848.3	784.3	691.8	603.3	NA	NA
	520.1	398.6	458.9	467.4	496.8	407.3	574.3	597.7	559.8	NA	NA
	219.5	219.8	245.8	359.2	408.5	463.3	575.4	591.8	724.4	NA	NA
Math & computer sci, total Mathematics Computer sciences Math & computer sci, n.e.c.	840.7	903.7	1,160.3	1,225.4	1,301.6	1,579.1	1,571.6	1,671.8	1,836.8	2,008.0	2,131.1
	241.3	227.6	318.7	290.8	342.3	258.6	254.5	301.6	334.1	NA	NA
	562.1	584.9	771.8	826.1	830.2	1,013.9	1,119.8	1,264.7	1,398.7	NA	NA
	37.3	91.1	69.9	108.5	129.1	306.6	197.3	105.5	104.0	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	4,226.6	4,944.5	4,977.0	5,499.4	5,479.4	5,708.4	5,680.9	5,690.3	5,895.4	6,091.6	6,218.6
	927.1	1,016.2	874.6	1,193.0	1,222.7	1,248.3	1,249.4	1,352.7	1,596.4	NA	NA
	580.8	653.1	630.4	494.0	499.1	546.5	526.6	596.3	631.1	NA	NA
	241.9	304.3	297.5	245.5	238.2	246.1	215.1	235.0	190.1	NA	NA
	317.7	305.0	330.2	252.0	277.9	339.4	300.2	275.6	244.1	NA	NA
Electrical	640.0	729.9	759.0	881.5	741.8	756.3	669.7	622.2	639.3	NA	NA
	268.3	335.5	337.2	466.9	378.1	412.5	294.0	254.6	249.6	NA	NA
	554.5	710.7	727.2	695.7	851.4	815.3	989.0	860.7	789.1	NA	NA
	696.3	889.8	1,020.8	1,270.9	1,270.2	1,344.0	1,437.0	1,493.2	1,555.6	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	630.0	727.3	689.7	674.9	647.4	678.7	654.6	696.3	806.1	894.5	889.9
	14.4	16.0	14.1	13.7	16.2	21.7	18.3	21.0	18.2	NA	NA
	197.2	187.4	211.6	204.7	193.3	206.5	194.2	205.2	230.5	NA	NA
	13.1	17.0	22.6	29.2	25.4	22.3	16.7	14.1	20.2	NA	NA
	116.2	184.0	80.7	76.7	68.1	47.8	41.2	25.9	100.8	NA	NA
	289.1	322.9	360.8	350.5	344.4	380.3	384.2	430.2	436.4	NA	NA
Other sciences, n.e.c	663.7	903.4	808.3	1,132.5	1,058.4	901.8	820.7	905.3	963.7	1,152.9	1,263.8

**NOTES:** Because of rounding, detail may not add to totals.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

During the Vol. 45 survey cycle, the National Aeronautics and Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data (such as mechanical engineering).

**KEY:** NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year) n.e.c. = Not elsewhere classified

## Table C-108. Federal obligations for basic research, by detailed field of science and engineering: fiscal years 1979-1989

#### [Dollars in millions]

Field of science and engineering	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total, all fields	4,192.7	4,674.2	5,041.3	5,481.6	6,260.1	7,067.4	7,818.7	8,153.1	8,942.4	9,473.6	10,602.0
Life sciences, total Biol & agricultural, total Biol (excl environmental) Environmental biology Agricultural	1,891.8	2,054.4	2,223.8	2,526.0	2,891.3	3,287.6	3,786.6	3,858.8	4,361.9	4,501.8	4,915.7
	1,279.3	1,339.4	1,462.4	1,674.8	1,928.8	2,174.7	2,515.5	2,543.0	2,870.4	2,855.3	3,102.9
	1,055.5	1,099.9	1,201.7	1,401.2	1,621.9	1,835.8	2,106.3	2,151.5	2,461.5	2,414.9	2,647.2
	90.8	86.1	83.3	83.2	92.7	120.8	125.7	125.7	141.0	146.8	157.3
	133.0	153.5	177.4	190.4	214.2	218.1	283.5	265.7	267.9	293.7	298.4
Medical sciences, totalLife sciences, n.e.c.	560.1	657.0	706.2	793.4	878.9	1,015.3	1,145.4	1,196.6	1,341.0	1,573.2	1,708.4
	52.4	58.0	55.3	57.8	83.6	97.7	125.7	119.2	150.6	73.2	104.4
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	75.1	84.2	91.0	89.9	92.9	107.9	132.8	133.0	147.1	177.8	187.1
	26.4	30.2	30.5	32.9	31.4	43.7	48.0	47.0	49.3	52.4	61.0
	34.0	31.3	30.2	33.7	32.8	33.4	46.9	45.3	45.5	40.9	38.1
	14.7	22.8	30.2	23.3	28.7	30.8	38.0	40.7	52.3	84.5	88.0
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	1,050.0	1,220.6	1,324.9	1,393.8	1,587.2	1,728.0	1,815.2	1,914.4	2,096.0	2,199.6	2,506.5
	280.6	279.4	274.2	271.1	354.5	379.6	400.7	453.1	504.5	458.5	524.6
	224.8	256.9	298.2	312.0	362.2	403.4	425.0	433.4	445.1	470.8	504.6
	535.6	668.2	735.4	790.7	855.1	921.4	959.9	1,003.4	1,072.3	1,205.5	1,395.3
	8.9	16.1	17.1	20.0	15.4	23.6	29.7	24.7	74.2	64.8	81.9
Environmental sciences, total Atmospheric sciences Geological sciences Oceanography Environmental sci, n.e.c.	457.3	522.4	532.8	520.0	580.1	656.7	699.7	749.1	781.0	872.7	1,016.9
	169.2	179.0	173.8	163.2	172.6	192.2	209.2	240.4	243.8	280.7	316.4
	157.6	198.3	194.2	177.5	178.3	198.0	250.0	265.5	266.2	267.3	334.9
	119.1	130.7	143.3	154.5	195.6	220.1	219.3	224.3	249.8	269.4	293.5
	11.4	14.3	21.5	24.9	33.5	46.4	21.2	18.9	21.2	55.2	72.1
Math & computer sci, total  Mathematics  Computer sciences  Math & computer sci, n.e.c	104.2	116.3	140.4	165.1	208.1	240.8	260.0	293.4	306.4	313.2	345.8
	60.0	66.8	79.2	90.9	100.9	113.9	130.3	142.4	158.4	165.4	167.8
	43.0	46.2	52.2	67.4	90.4	104.8	116.1	131.4	128.5	125.5	159.5
	1.2	3.2	9.0	6.8	16.8	22.2	13.6	19.6	19.5	22.4	18.4
Engineering, total Aeronautical Astronautical Chemical Civil	434.7	465.2	526.0	610.5	689.5	845.0	884.2	968.5	989.5	1,006.2	1,183.7
	88.4	104.2	113.3	126.5	140.7	225.5	191.5	226.3	237.4	231.0	327.9
	25.2	27.2	33.2	44.8	50.4	52.4	41.6	52.5	48.8	48.4	58.9
	24.6	26.1	31.3	35.2	50.4	55.5	74.4	73.0	77.5	88.6	50.1
	14.2	22.0	23.4	32.0	32.4	41.9	43.6	45.2	45.7	46.1	51.7
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	62.0	70.6	78.5	93.6	95.8	130.4	144.9	156.3	175.4	154.0	173.8
	35.9	42.2	47.4	53.1	60.7	64.1	88.2	83.6	87.2	83.5	100.8
	151.1	121.3	138.5	155.9	182.9	187.3	211.9	228.5	209.8	230.1	254.8
	33.2	51.6	60.5	69.4	76.2	87.9	88.2	103.2	107.8	124.4	165.7
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	129.7	147.2	137.0	120.2	137.7	132.6	140.7	113.5	129.5	146.8	154.6
	12.5	14.2	13.1	13.1	11.2	16.8	15.8	11.2	12.3	12.1	12.1
	32.7	40.0	34.1	39.0	41.0	29.7	34.3	26.3	29.0	34.7	37.7
	4.1	7.4	6.3	4.4	4.6	4.1	5.8	4.1	5.5	5.1	5.4
	18.4	25.4	22.6	18.7	32.8	33.9	32.4	30.0	34.3	36.8	38.2
	62.0	60.2	60.9	45.1	48.2	48.1	52.4	41.9	48.4	58.1	61.2
Other sciences, n.e.c.	50.0	63.9	65.4	56.1	73.3	68.8	99.4	122.5	130.9	255.5	291.7

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

## Table C-108a. Federal obligations for basic research, by detailed field of science and engineering: fiscal years 1990-2000

#### [Dollars in millions]

Field of science and engineering	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelin	ninary
										1999	2000
Total, all fields	11,285.6	12,170.8	12,489.9	13,399.1	13,523.5	13,877.0	14,464.0	14,941.9	15,613.0	17,366.9	18,209.4
Life sciences, total Biol & agricultural, total Biol (excl environmental) Environmental biology Agricultural	5,177.5	5,433.6	5,841.7	6,288.8	6,472.1	6,601.3	6,879.0	7,203.8	7,853.4	8,990.4	9,182.9
	3,219.0	3,374.9	3,517.6	3,787.8	3,751.9	3,836.5	3,922.4	3,945.1	4,222.3	NA	NA
	2,742.2	2,868.5	2,981.8	3,222.5	3,139.2	3,248.3	3,387.2	3,391.0	3,653.0	NA	NA
	168.3	186.9	201.6	223.2	242.1	220.6	205.7	206.1	196.8	NA	NA
	308.5	319.4	334.2	342.2	370.6	367.5	329.5	348.1	372.5	NA	NA
Medical sciencesLife sciences, n.e.c.	1,849.6	1,857.7	2,131.0	2,380.9	2,610.3	2,615.9	2,740.8	3,035.2	3,392.4	NA	NA
	108.9	201.0	193.1	120.1	109.9	148.9	215.9	223.4	238.6	NA	NA
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	215.1	225.5	122.6	246.8	246.1	278.0	291.5	293.9	312.0	357.4	376.7
	65.3	68.2	14.3	18.1	24.8	31.4	33.5	30.2	27.3	NA	NA
	60.9	69.2	16.9	16.0	16.3	22.2	10.1	13.0	12.9	NA	NA
	88.8	88.1	91.4	212.7	205.0	224.4	248.0	250.7	271.8	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	2,661.5	2,881.5	2,951.4	2,907.1	2,826.9	2,864.8	2,862.6	2,976.4	2,941.4	3,198.0	3,418.5
	579.9	612.3	729.7	663.4	724.8	731.6	708.8	754.2	706.9	NA	NA
	502.1	538.7	556.6	543.7	540.3	559.4	550.7	517.8	517.5	NA	NA
	1,474.3	1,644.9	1,607.5	1,600.6	1,502.3	1,507.4	1,545.6	1,561.7	1,579.8	NA	NA
	105.1	85.5	57.6	99.4	59.6	66.4	57.4	142.6	137.1	NA	NA
Environmental sciences, total Atmospheric sciences Geological sciences Oceanography Environmental sci, n.e.c.	1,274.8	1,263.5	1,303.6	1,533.5	1,516.5	1,467.5	1,554.0	1,543.5	1,528.7	1,641.7	1,795.2
	443.7	449.0	435.2	635.1	698.3	688.2	671.2	679.5	655.2	NA	NA
	439.7	499.0	526.5	555.3	487.8	451.7	390.0	388.3	391.2	NA	NA
	299.7	197.5	210.0	207.2	190.2	188.2	309.1	303.5	286.0	NA	NA
	91.6	118.0	131.9	135.9	140.2	139.3	183.8	172.1	196.4	NA	NA
Math & computer sci, total  Mathematics  Computer sciences  Math & computer sci, n.e.c	406.9	426.1	481.4	511.3	521.7	603.0	639.6	661.4	705.5	754.7	839.5
	176.3	164.4	228.2	221.8	247.7	164.0	162.6	238.2	250.7	NA	NA
	225.2	223.5	247.7	284.3	262.3	317.1	376.8	389.5	419.1	NA	NA
	5.3	38.2	5.5	5.1	11.8	121.9	100.2	33.6	35.6	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	1,101.5	1,233.7	1,249.8	1,207.4	1,290.4	1,448.9	1,612.1	1,583.0	1,594.4	1,653.5	1,803.4
	269.6	256.2	245.1	246.2	275.9	271.0	261.7	269.1	285.2	NA	NA
	62.3	69.7	94.4	53.6	59.8	66.3	71.8	69.8	68.0	NA	NA
	75.8	101.7	105.0	72.8	70.9	66.7	59.8	68.1	52.3	NA	NA
	47.3	59.3	53.4	38.7	38.1	70.1	52.9	45.4	35.9	NA	NA
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	146.9	142.5	165.4	203.1	205.7	204.6	201.5	172.9	213.9	NA	NA
	91.4	115.6	113.9	142.6	141.6	164.7	113.2	104.9	106.7	NA	NA
	260.2	294.6	273.6	241.3	330.2	368.5	501.8	462.6	478.2	NA	NA
	147.9	194.3	199.2	209.1	168.3	236.9	349.4	390.4	354.3	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	146.0	161.3	139.9	194.1	184.0	206.7	212.5	221.0	224.8	249.1	252.6
	12.5	12.7	11.0	10.0	9.7	15.1	12.7	14.8	13.5	NA	NA
	37.1	37.3	39.3	46.0	38.4	44.7	39.4	46.1	41.5	NA	NA
	6.4	7.1	6.4	6.4	4.8	7.1	5.7	4.9	4.6	NA	NA
	24.2	28.2	10.2	11.1	13.1	14.3	13.3	8.2	23.5	NA	NA
	65.8	75.9	72.9	120.6	118.1	125.5	141.3	147.0	141.7	NA	NA
Other sciences, n.e.c.	302.3	545.6	399.4	510.1	465.6	406.9	412.8	459.0	452.7	522.2	540.6

**NOTES:** Because of rounding, detail may not add to totals.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

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The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data (such as mechanical engineering).

**KEY:** NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year) n.e.c. = Not elsewhere classified

## Table C-109. Federal obligations for applied research, by detailed field of science and engineering: fiscal years 1979-1989

#### [Dollars in millions]

Field of science and engineering	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
	10.0						1000	1000			
Total, all fields	6,342.3	6,923.2	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5
Life sciences, total	1,956.5	2,137.9	2,211.8	2,219.5	2,286.6	2,348.3	2,575.9	2,605.5	2,979.5	3,222.7	3,579.4
	1,041.0	1,168.1	1,249.4	1,137.0	1,135.6	1,150.3	1,239.8	1,318.4	1,488.1	1,718.0	1,917.2
	646.7	730.8	794.9	678.1	683.7	727.3	779.3	841.9	1,040.5	1,266.8	1,336.0
	125.8	143.6	137.0	100.4	101.0	129.2	134.6	138.3	148.6	154.2	210.5
	268.6	293.7	317.4	358.6	351.0	293.8	325.8	338.1	299.1	297.0	370.7
Medical sciences, total	820.5	879.9	903.7	979.6	1,048.5	1,097.5	1,223.1	1,163.8	1,323.8	1,367.8	1,514.1
Life sciences, n.e.c.	95.0	89.9	58.7	102.9	102.4	100.4	113.0	123.3	167.6	136.9	148.1
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	122.3	114.8	117.9	128.5	147.9	158.8	194.3	201.0	222.4	212.0	234.5
	30.4	29.7	27.0	26.7	31.8	37.1	43.2	43.1	49.1	52.9	60.8
	49.6	63.5	63.3	64.4	71.8	74.3	96.0	98.3	108.9	108.4	111.8
	42.3	21.5	27.7	37.4	44.3	47.4	55.1	59.7	64.4	50.7	61.9
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	742.6	780.0	895.6	1,106.5	1,304.3	1,241.0	1,230.8	1,154.6	1,156.6	1,117.7	1,198.8
	3.8	6.3	6.8	4.7	3.0	2.7	14.1	15.1	17.7	12.3	17.3
	218.8	197.6	188.7	169.2	158.1	203.0	225.4	229.0	235.2	232.3	278.0
	487.1	514.4	610.2	819.8	999.5	915.0	856.1	802.6	781.4	769.8	795.5
	32.8	61.8	89.9	112.9	143.7	120.3	135.2	107.9	122.4	103.3	108.0
Environmental sciences, total Atmospheric sciences Geological sciences Oceanography Environmental sci, n.e.c.	643.7	738.6	588.2	628.3	671.2	619.2	704.0	732.6	730.6	734.3	756.3
	179.5	230.5	199.6	262.6	288.1	242.0	276.8	280.9	309.1	307.1	271.6
	201.1	203.4	201.9	180.1	155.2	161.0	179.0	178.4	175.6	174.3	207.8
	101.4	131.4	118.4	106.8	147.9	143.4	179.3	205.4	177.6	190.9	198.4
	161.7	173.3	68.4	78.7	80.0	72.9	69.0	67.9	68.3	61.9	78.5
Math & computer sci, total  Mathematics  Computer sciences  Math & computer sci, n.e.c	106.1	124.7	138.6	185.0	211.3	199.5	314.9	322.0	334.3	329.6	389.7
	24.2	24.1	38.6	37.3	32.6	37.1	53.4	42.1	46.1	52.5	68.3
	63.3	82.4	69.3	103.5	124.1	109.7	164.2	171.0	169.3	167.2	205.1
	18.6	18.2	30.7	44.3	54.6	52.7	97.3	108.9	118.9	109.9	116.3
Engineering, total Aeronautical Astronautical Chemical Civil	2,137.0	2,364.9	2,545.4	2,776.1	2,827.5	2,779.1	2,733.4	2,770.4	2,916.8	2,950.2	3,258.4
	536.5	604.0	596.3	614.7	679.9	634.9	546.5	549.3	573.0	570.8	658.9
	226.0	275.1	270.8	245.9	271.1	344.4	383.2	474.4	575.9	526.9	618.5
	89.7	70.2	116.3	59.9	94.6	88.9	179.9	172.8	138.3	169.5	92.2
	110.8	136.8	135.8	169.9	156.0	161.0	173.0	157.8	158.7	168.7	178.1
Electrical Mechanical Metallurgy & materials Engineering, n.e.c.	355.8	446.6	478.2	518.6	519.1	499.7	481.9	518.1	610.9	577.1	669.3
	160.0	165.8	157.3	148.1	205.7	126.3	178.8	153.0	146.2	157.2	156.5
	98.2	114.8	117.5	153.2	149.6	153.7	227.4	216.6	152.2	226.6	266.2
	560.0	551.6	673.4	865.7	751.4	770.1	562.8	528.5	561.6	553.3	618.8
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	397.6	376.6	360.5	265.7	297.5	303.8	319.3	302.0	350.5	339.0	396.4
	4.9	2.9	1.5	1.5	1.6	1.7	2.1	2.4	2.9	2.2	1.8
	149.2	152.8	172.6	118.2	124.6	117.6	125.4	105.0	119.6	124.8	129.1
	9.8	4.8	4.5	3.2	6.6	6.7	8.9	7.5	5.8	7.1	8.1
	46.1	46.1	42.4	33.3	35.0	36.3	34.0	37.0	39.6	45.0	55.9
	187.6	170.1	139.5	109.6	129.8	141.4	148.9	150.2	182.6	159.9	201.6
Other sciences, n.e.c.	236.6	285.7	313.5	231.0	247.1	261.7	242.2	260.9	307.4	271.0	350.0

NOTE: Because of rounding, detail may not add to totals.

KEY: n.e.c. = Not elsewhere classified

## Table C-109a. Federal obligations for applied research, by detailed field of science and engineering: fiscal years 1990-2000

#### [Dollars in millions]

Field of science and engineering	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prelim	ninary
										1999	2000
Total, all fields	10,336.8	11,797.6	12,000.7	13,491.4	13,887.7	14,557.4	13,795.7	14,423.4	15,309.3	16,454.8	16,470.1
Life sciences, total Biol & agricultural, total Biol (excl environmental) Environmental biology Agricultural	3,652.3	4,188.4	4,068.8	4,483.3	4,812.2	5,209.8	5,185.3	5,457.6	5,704.2	6,395.0	6,378.8
	1,959.4	2,223.0	2,116.0	2,271.5	2,351.1	2,566.0	2,707.6	2,598.9	2,851.5	NA	NA
	1,402.5	1,589.3	1,453.2	1,567.4	1,606.6	1,677.1	1,922.8	1,929.2	2,053.6	NA	NA
	174.0	272.8	309.4	333.3	387.8	586.2	498.3	376.4	407.6	NA	NA
	382.9	360.9	353.4	370.8	356.7	302.8	286.5	293.2	390.3	NA	NA
Medical sciencesLife sciences, n.e.c.	1,532.7	1,602.6	1,778.9	2,023.5	2,251.8	2,356.3	2,232.6	2,497.6	2,603.9	NA	NA
	160.2	362.9	173.9	188.2	209.3	287.4	245.2	361.1	248.8	NA	NA
Psychology, total Biological aspects Social aspects Psychological sci, n.e.c.	233.5	256.9	175.6	303.9	302.2	344.6	233.5	251.5	279.0	304.3	309.4
	65.3	72.0	20.3	19.1	23.3	27.4	29.3	27.6	14.3	NA	NA
	116.5	128.2	84.1	118.7	100.5	134.1	73.4	83.7	84.6	NA	NA
	51.7	56.7	71.2	166.1	178.4	183.1	130.8	140.2	180.1	NA	NA
Physical sciences, total Astronomy Chemistry Physics Physical sciences, n.e.c.	1,147.2	1,353.9	1,487.7	1,519.8	1,426.5	1,413.5	1,060.4	1,172.8	1,268.3	1,258.5	1,300.9
	17.2	19.3	9.4	22.8	22.8	32.9	20.2	20.6	25.2	NA	NA
	259.6	289.7	339.6	299.5	334.2	304.1	330.4	327.9	301.5	NA	NA
	780.6	816.0	970.7	1,037.7	940.9	943.8	445.7	505.9	552.0	NA	NA
	89.8	228.9	168.1	159.8	128.7	132.7	264.2	318.4	389.6	NA	NA
Environmental sciences, total Atmospheric sciences Geological sciences Oceanography Environmental sci, n.e.c.	899.3	886.3	904.0	1,075.0	1,321.7	1,387.0	1,465.7	1,502.2	1,533.2	1,529.5	1,413.7
	329.7	353.7	332.0	349.0	396.7	447.3	414.6	484.8	519.2	NA	NA
	221.4	229.7	209.2	242.6	350.1	396.6	394.3	303.5	212.1	NA	NA
	220.4	201.0	248.9	260.2	306.6	219.1	265.2	294.2	273.8	NA	NA
	127.8	101.7	113.8	223.3	268.3	324.0	391.7	419.7	528.1	NA	NA
Math & computer sci, total  Mathematics  Computer sciences  Math & computer sci, n.e.c	433.9	477.6	678.9	714.1	779.9	976.1	932.0	1,010.5	1,131.4	1,253.3	1,291.5
	65.0	63.2	90.5	68.9	94.7	94.6	91.8	63.4	83.3	NA	NA
	336.9	361.4	524.0	541.8	567.9	696.8	743.1	875.1	979.6	NA	NA
	31.9	52.9	64.3	103.4	117.3	184.7	97.1	71.9	68.4	NA	NA
Engineering, total Aeronautical Astronautical Chemical Civil	3,125.1	3,710.8	3,727.1	4,292.0	4,189.0	4,259.5	4,068.9	4,107.3	4,301.0	4,438.1	4,415.2
	657.5	760.0	629.5	946.8	946.8	977.2	987.6	1,083.7	1,311.2	NA	NA
	518.5	583.4	536.0	440.4	439.3	480.2	454.7	526.5	563.2	NA	NA
	166.0	202.6	192.5	172.7	167.3	179.4	155.4	166.9	137.9	NA	NA
	270.4	245.7	276.9	213.3	239.8	269.3	247.3	230.2	208.3	NA	NA
Electrical	493.1	587.4	593.6	678.4	536.1	551.7	468.3	449.3	425.4	NA	NA
	176.9	220.0	223.4	324.3	236.5	247.8	180.8	149.7	142.9	NA	NA
	294.3	416.1	453.6	454.3	521.2	446.9	487.2	398.1	310.9	NA	NA
	548.4	695.4	821.6	1,061.7	1,102.0	1,107.1	1,087.6	1,102.8	1,201.3	NA	NA
Social sciences, total Anthropology Economics Political science Sociology Social sciences, n.e.c.	484.0	566.0	549.8	480.8	463.3	472.0	442.1	475.3	581.3	645.4	637.3
	1.9	3.3	3.1	3.7	6.6	6.6	5.6	6.2	4.7	NA	NA
	160.1	150.1	172.3	158.7	154.9	161.8	154.8	159.1	188.9	NA	NA
	6.8	10.0	16.1	22.8	20.6	15.2	10.9	9.2	15.6	NA	NA
	92.0	155.7	70.5	65.6	55.0	33.5	27.9	17.7	77.4	NA	NA
	223.3	246.9	287.9	229.9	226.2	254.9	242.8	283.2	294.8	NA	NA
Other sciences, n.e.c	361.5	357.8	408.8	622.4	592.8	494.9	407.9	446.3	510.9	630.7	723.2

**NOTES:** Because of rounding, detail may not add to totals.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

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# Table C-110. Federal obligations for research and development for selected agencies, by State: fiscal years 1979-1989

#### [Dollars in millions]

State	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	27,084.2	28,627.3	31,929.6	35,361.6	37,627.8	41,148.5	47,214.8	50,310.2	54,067.4	55,471.0	59,485.0
Alabama	516.9	455.7	493.5	561.5	671.7	792.6	896.6	1,188.2	1,346.4	1,363.7	1,646.7
Alaska	45.9	42.5	51.8	40.0	40.4	47.7	51.5	49.4	48.8	50.5	71.3
Arizona	201.4	334.6	367.7	264.5	469.3	383.9	458.2	398.1	414.9	369.4	501.2
Arkansas	37.3	30.0	31.2	43.5	31.4	35.0	39.7	40.5	52.3	56.4	57.0
California	6,338.6	6,097.7	7,049.7	8,888.3	8,194.9	8,995.8	10,771.8	11,512.3	13,672.2	14,895.9	15,919.4
Colorado	442.2	573.7	632.8	556.6	436.2	531.6	629.2	1,636.4	1,516.3	1,408.4	1,618.1
Connecticut	328.4	470.3	485.0	439.6	743.3	675.9	742.8	577.3	672.2	619.5	596.7
Delaware	14.4	20.8	25.9	34.6	20.4	63.7	34.7	30.2	32.3	36.0	31.9
District of Columbia	768.4	807.0	921.0	954.6	1,196.1	1,796.0	2,077.7	2,324.0	2,209.2	2,925.3	1,914.9
Florida	913.1	1,120.8	1,373.7	1,776.4	1,276.0	1,138.1	1,205.2	1,448.0	2,297.3	2,133.4	2,269.8
Georgia	184.4	169.8	195.0	217.3	237.2	245.5	291.8	250.5	352.1	350.4	392.5
Hawaii	40.8	42.6	49.9	44.5	71.4	52.9	58.2	54.7	63.9	82.2	97.4
Idaho	147.1	147.7	119.5	127.0	223.4	195.2	259.7	266.6	232.7	250.1	195.9
Illinois	547.2	599.9	572.6	543.0	567.5	675.6	772.8	745.0	827.3	850.7	909.1
Indiana	122.0	162.4	170.1	186.2	213.6	236.0	227.7	295.1	339.4	312.1	392.5
lowa	84.9	121.7	147.4	136.3	95.2	134.5	150.3	224.3	162.4	197.1	190.9
Kansas	136.3	353.6	471.0	637.7	97.4	101.9	138.1	112.7	94.2	126.7	128.8
Kentucky	43.0	107.9	101.0	97.2	93.1	56.5	69.2	59.1	61.9	68.5	73.0
Louisiana	209.1	196.3	331.8	236.8	186.6	129.7	118.8	92.4	107.4	101.3	179.6
Maine	23.1	25.9	24.4	23.9	29.3	38.1	36.7	35.6	178.6	39.8	67.7
Maryland	2,299.8	2,465.0	2,585.1	2,850.2	3,412.4	3,917.9	4,371.6	4,512.5	4,036.3	4,355.3	4,849.0
Massachusetts	2,055.6	2,047.7	2,407.1	2,775.2	2,559.3	2,882.6	3,276.7	3,240.3	3,910.8	2,702.0	2,882.5
Michigan	264.4	377.5	357.2	376.7	412.5	479.4	502.1	460.5	463.3	417.5	686.2
Minnesota	202.8	261.6	309.0	378.6	448.2	636.8	718.7	515.4	506.6	576.8	597.3
Mississippi	100.7	109.3	125.5	125.7	185.8	145.5	172.4	143.4	184.4	185.1	198.7
Missouri	778.9	801.6	820.4	911.3	576.8	659.5	694.2	677.8	614.7	637.6	1,241.9
Montana	41.6	45.7	45.4	42.7	35.0	26.6	26.0	26.4	30.1	35.5	36.2
Nebraska	31.3	31.6	31.7	32.0	42.3	33.0	34.6	41.1	48.9	52.1	51.2
Nevada	222.1	214.5	263.0	376.3	647.1	440.5	490.4	462.6	462.0	443.3	427.5
New Hampshire	94.1	50.2	54.8	50.8	76.8	116.4	130.3	136.0	83.6	60.8	98.0
New Jersey	649.3	729.4	775.4	887.9	1,293.4	1,550.0	1,791.8	1,781.4	1,114.9	1,209.3	1,320.4
New Mexico	955.5	954.2	1,224.1	1,322.6	1,804.9	2,104.8	2,368.6	2,500.0	1,998.2	2,296.1	2,220.4
New York	1,362.2	1,468.8	1,557.7	1,692.5	2,523.2	2,493.4	3,128.4	3,163.5	2,941.8	2,688.7	2,904.1
North Carolina	220.9	227.7	259.8	272.7	312.5	378.3	485.7	497.7	583.8	625.0	562.8
North Dakota	33.4	38.7	40.1	36.5	27.2	37.8	32.7	27.2	29.4	32.5	33.3
Ohio	1,053.2	1,054.7	1,117.2	1,024.8	1,170.1	1,366.5	1,520.5	1,591.7	1,862.9	1,865.2	1,938.8
Oklahoma	70.1	94.5	82.4	65.6	67.9	65.5	81.3	69.8	99.4	103.7	117.6
Oregon	100.1	97.9	105.6	106.3	108.0	137.8	151.6	127.6	133.9	170.3	168.4
Pennsylvania	1,099.9	1,059.4	1,082.9	1,131.5	1,173.3	1,142.2	1,329.6	1,301.3	1,681.9	1,731.6	1,961.9
Rhode Island	140.7	149.9	182.5	242.1	267.5	306.1	334.3	392.7	365.4	335.6	314.1
South Carolina	114.3	87.5	96.1	98.7	104.6	119.8	119.9	122.5	123.7	148.7	222.6
South Dakota	10.2	9.9	10.2	19.0	12.4	14.0	14.4	14.6	12.8	13.1	15.0
Tennessee	644.1	722.9	883.6	702.3	435.5	546.7	556.3	591.3	732.0	567.2	576.0
Texas	1,000.1	908.6	1,031.7	1,054.3	1,412.6	1,473.8	1,664.6	1,912.0	2,261.3	2,514.9	3,189.2
Utah	211.6	243.9	305.7	287.9	268.9	232.4	250.9	274.6	427.3	462.0	517.8
Vermont	16.7	36.6	18.7	35.7	23.7	33.8	36.1	41.1	39.6	55.9	60.1
Virginia	945.1	1,059.3	1,066.4	1,268.1	2,286.1	2,247.2	2,472.4	2,810.0	2,292.5	2,729.1	2.778.0
Washington	864.7	951.8	1,047.5	1,038.9	709.3	881.8	1,036.5	1,153.9	1,878.8	1,765.6	1,766.2
West Virginia	107.2	152.0	151.2	91.0	82.5	73.3	66.5	88.7	115.8	113.4	104.0
Wisconsin	111.0	121.7	132.2	129.4	142.4	166.0	200.8	181.9	204.8	223.2	263.5
Wyoming	41.0	53.9	58.2	25.4	28.4	34.0	25.1	14.5	23.5	29.0	38.5
Outlying areas	39.4	45.3	38.9	40.7	32.0	44.9	62.8	36.8	42.9	33.0	45.7
Offices abroad	57.7	73.5	47.2	59.0	51.0	34.6	35.9	59.2	78.2	54.2	43.4

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

# Table C-110a. Federal obligations for research and development for selected agencies, by State: fiscal years 1990-1998 (revised)

### [Dollars in millions]

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								Pa	age 1 of 2
State	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	62,105.2	59,865.4	64,089.7	65,743.8	65,820.1	66,700.1	66,292.4	68,510.2	70,513.0
AlabamaAlaska	1,805.4 90.7	1,863.2 102.7	2,151.7 93.0	2,149.4 92.7	1,819.2 157.3	1,931.3 96.9	2,178.8 93.3	2,213.7 99.9	2,012.8 106.9
Arizona	591.7	516.8	638.2	535.3	800.2	902.3	706.7	732.1	985.7
Arkansas	85.7	85.9	68.8	79.2	88.9	97.7	148.2	95.3	97.0
California	16,249.3	14,488.3	15,999.1	14,883.7	11,250.6	12,697.7	12,658.1	13,730.9	12,215.8
Colorado	1,888.3	2,694.2	1,479.2	1,343.4	1,356.4	951.7	1,277.6	1,340.2	1,334.2
Connecticut	509.8	672.7	578.3	522.2	733.5	900.7	798.9	846.5	692.3
Delaware	28.3	41.8	43.1	56.2	50.4	57.7	64.9	49.0	45.2
District of Columbia	1,593.1	1,943.7	2,185.2	2,488.8	2,483.6	2,755.4	2,574.1	2,232.3	2,229.1
Florida	2,343.4	2,181.1	2,832.3	2,775.3	2,906.7	2,391.8	2,957.9	3,326.4	2,752.4
Georgia	364.1	466.5	2,512.6	3,035.3	5,546.4	4,366.0	4,137.8	3,919.9	3,442.6
Hawaii	100.0	112.6	150.7	113.0	140.3	139.3	147.6	150.7	160.8
Idaho	326.1	279.1	299.5	303.7	227.8	211.0	244.6	205.7	213.6
Illinois	957.2	959.4	921.9	963.8	1,088.6	1,107.4	1,094.3	1,140.2	1,127.6
Indiana	363.6	378.7	367.0	513.6	403.6	426.3	439.8	410.4	377.7
lowa	186.7	209.8	194.7	215.8	223.8	212.1	213.4	228.2	236.1
Kansas	116.4	83.6	91.2	87.9	84.8	120.4	212.0	255.5	128.7
Kentucky	96.5	122.4	71.7	86.7	90.1	73.1	78.6	91.3	189.0
Louisiana	121.2	163.6	169.6	152.6	210.5	170.1	228.7	211.0	223.6
Maine	39.7	57.1	60.6	65.2	82.1	53.1	56.7	68.7	103.9
Maryland	5,332.1	5,570.7	5,779.7	7,238.5	6,659.5	7,343.7	6,730.7	7,328.8	7,964.2
Massachusetts	2,982.8	3,146.4	3,227.9	3,551.7	3,201.8	3,337.8	3,192.1	3,437.5	3,112.3
	810.8	772.6	876.3	878.0	771.0	683.2	707.9	735.1	748.4
Michigan					475.1	570.2			807.1
Minnesota	529.8	455.7	456.4	445.5			679.5	609.4	
Mississippi	471.7	230.6	255.7	259.8	255.9	209.7	250.6	289.8	280.4
Missouri	1,064.3	587.9	733.5	726.3	2,272.6	1,606.2	1,267.8	1,130.1	930.7
Montana	30.9	45.8	71.5	69.1	57.0	63.8	63.0	79.3	80.7
Nebraska	76.4	76.1	71.1	78.5	86.5	84.7	88.5	83.0	85.0
Nevada	484.7	496.0	465.8	406.2	347.7	368.9	253.2	295.0	290.9
New Hampshire	145.1	196.3	156.1	237.6	218.9	213.2	268.5	278.7	269.1
New Jersey	1,601.6	1,698.2	1,646.8	1,422.8	1,385.7	1,297.7	1,272.6	1,318.8	1,459.6
New Mexico	2,311.3	2,018.7	2,211.3	2,309.6	1,894.1	1,959.9	1,955.0	1,933.1	1,891.6
New York	2,960.8	3,086.3	3,058.7	2,538.0	2,678.7	2,585.9	2,504.9	2,471.0	2,551.8
North Carolina	618.6	673.8	700.7	719.1	734.3	831.6	821.5	900.3	924.7
North Dakota	53.1	43.7	54.2	50.3	49.6	47.4	46.2	53.0	52.1
Ohio	2,088.5	1,729.9	1,863.4	1,921.7	1,736.4	1,810.0	1,681.7	1,879.8	5,562.2
Oklahoma	162.6	131.5	126.1	117.9	142.1	158.7	138.3	160.4	175.5
Oregon	175.6	216.5	226.5	229.4	279.2	283.4	308.2	319.6	314.7
Pennsylvania	2,074.6	2,125.6	1,794.4	2,566.5	1,983.4	2,394.2	1,921.2	1,893.7	1,886.3
Rhode Island	391.1	433.8	386.3	495.6	433.8	514.6	583.2	403.8	385.4
South Carolina	230.9	250.4	172.1	173.2	198.5	173.2	186.7	166.6	186.2
South Dakota	15.7	22.5	23.9	26.9	26.5	26.5	35.0	42.0	46.0
Tennessee	825.0	732.2	666.0	674.4	671.3	582.5	558.6	566.2	621.2
Texas	3,496.8	2,321.4	2,873.0	2,546.2	3,654.3	4,068.9	3,493.5	3,640.2	4,110.8
Utah	437.7	429.1	314.0	298.8	324.9	368.8	351.7	319.9	392.8
Vermont	42.5	56.1	51.3	62.1	48.5	53.0	47.1	49.9	57.6
Virginia	2,733.5	2,909.0	3,231.3	3,402.6	3,726.9	3,392.2	4,576.3	4,849.8	4,667.9
Washington	1.567.0	1.241.1	900.5	878.1	963.8	1,131.6	1,152.9	1.226.2	1.244.2
West Virginia	116.6	177.9	166.4	206.2	212.9	287.9	254.4	193.1	242.8
Wisconsin	271.7	294.5	307.7	350.8	358.3	338.5	331.4	332.2	332.2
VVI3CU(13III	2/1./	294.5	307.7	350.8	330.3	330.5	331.4	332.2	332.2

See explanatory information, if any, and SOURCE at end of table.

## Table C-110a. Federal obligations for research and development for selected agencies, by State: fiscal years 1990-1998 (revised)

#### [Dollars in millions]

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State	1990	1991	1992	1993	1994	1995	1996	1997	1998
Wyoming Outlying areas Puerto Rico Other Areas Offices abroad	57.4 54.9 NA NA 31.7	29.8 221.0 NA NA 21.0	41.4 246.9 NA NA 24.4	48.2 332.7 NA NA 17.8	36.8 166.3 50.5 115.8 23.1	46.7	37.5 172.6 51.6 121.0 48.5	93.3 58.9 34.3	50.0

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

**KEY:** NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year)

# Table C-111. Federal obligations for R&D plant for selected agencies, by State: fiscal years 1979-1989

[Dollars in millions]

State	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
otal	1,393.8	1,533.1	1,454.4	1,380.1	1,280.9	1,770.6	1,774.7	1,482.5	1,793.8	2,025.1	2,144.3
Alabama	2.6	47.9	16.5	5.8	6.0	26.4	41.4	41.2	42.8	51.8	47.2
Alaska	.8	.1	-	-	21.3	.1	12.9	.0	.0	6.4	.0
Arizona	35.3	1.8	.4	.4	5.4	3.6	2.9	1.7	19.6	21.8	18.1
Arkansas	.2	.7	.7	1.0	1.5	.5	.5	.9	.5	.4	3.1
California	400.2	377.4	355.4	334.6	368.4	316.8	404.2	323.5	290.7	429.0	446.7
Colorado	9.7	35.6	26.9	16.6	43.9	52.3	32.4	16.3	12.8	53.5	62.5
Connecticut	12.3	1.0	9.2	25.1	5.5	5.2	8.4	1.2	.4	1.0	1.4
Delaware	.0	.7	1.6	.1	.4	.6	.4	.4	.4	1.3	
District of Columbia	22.0	14.3	31.7	33.6	24.6	62.4	92.5	28.0	24.1	15.4	17.
Florida	46.0	46.7	25.5	31.8	37.2	91.2	42.8	53.2	64.6	86.0	100.0
Tiorida	40.0	40.7	23.3	31.0	31.2	91.2	42.0	33.2	04.0	00.0	100.0
Georgia	1.0	.6	1.6	1.5	2.1	3.8	2.6	15.6	23.1	2.7	10.8
Hawaii	.5	.2	.7	.1	1.6	.6	.9	.6	.6	6.9	
Idaho	41.8	45.1	11.9	21.4	19.7	11.9	8.3	24.7	17.8	39.6	12.0
Illinois	61.9	71.5	74.1	74.3	80.3	81.2	110.1	96.6	94.3	76.7	94.9
Indiana	.7	.7	.9	.6	1.3	2.8	4.5	.5	5.8	1.9	1.
Laura		2.0	<u> </u>				,	2.0	00 -		
lowa	2.2	2.9	2.1	2.2	2.7	3.5	1.4	3.3	22.7	3.8	6.2
Kansas	_ [	.1	.1	.1	.2	.3	2.3	41.0	49.8	.1	1.6
Kentucky	2.9		4.3	1.4	.4	.3	.3	.3	1.7	.1	
Louisiana		12.6	14.1	22.2	2.4	2.6	2.0	2.2	2.5	31.9	47.2
Maine	.1	-	-	-	-	-	-	-	-	.3	
Maryland	64.3	53.3	52.3	82.2	80.8	180.1	145.4	78.6	109.8	79.2	120.
Massachusetts	36.9	20.4	35.7	23.3	29.4	62.8	66.1	17.7	36.3	94.2	54.
Michigan	3.0	8.3	9.5	7.8	1.1	6.4	5.1	1.2	1.4	4.4	4.6
	.8	.3	.5	.4	.8	3.1	.8	1.1	.4	.7	1.8
Minnesota	3.8	6.6	3.4	5.9	6.4				39.1		41.1
Mississippi	3.0	0.0	3.4	5.9	0.4	13.7	12.6	13.5	39.1	19.1	41.1
Missouri	5.6	40.9	1.8	5.7	6.0	3.9	3.7	4.7	4.8	2.7	3.7
Montana	1.2	3.7	.1	.1	.2	.2	.2	.2	.2	.2	
Nebraska	.8	2.1	.6	.7	.5	.7	.4	7.3	1.4	4.1	2.8
Nevada	24.2	22.4	82.9	30.0	33.0	108.4	155.2	69.9	87.0	103.3	69.3
New Hampshire	5.4		7.7	.1	.7	.1	.4	.3	.2	-	.2
Now Jorgey	64.8	60.5	EE 7	<b>57</b> 0	42.0	F2 7	40.1	27.6	39.8	E2 6	46.8
New Jersey			55.7	57.0		52.7		37.6	256.6	52.6 231.4	
New Mexico	138.6 69.4	169.5 91.4	119.3	196.6	191.8	102.3	243.7	192.0			239.
New York			85.1	65.0	77.0	175.0	75.3	105.0	113.4	115.3	101.0
North Carolina	3.9	8.2	1.2	1.4	4.1	3.6	10.4	2.2	3.4	.9	4.3
North Dakota	1.4	4.1	1.4	1.2	.9	.9	1.3	8.8	.8	9.2	6.0
Ohio	28.0	40.3	65.2	23.7	7.5	49.6	46.5	19.2	58.1	68.5	69.8
Oklahoma	.6	3.2	2.7	1.2	1.3	.9	1.7	2.3	.9	10.7	4.
Oregon	.9	3.9	1.0	.1	.2	3.4	1.2	12.0	24.7	8.6	30.
Pennsylvania	46.5	35.5	95.2	51.1	19.2	20.1	18.7	19.0	41.4	56.3	79.0
Rhode Island	3.5	2.6	1.6	2.1	1.9	.7	31.6	5.5	6.4	2.0	1.0
South Carolina	9.7	3.1	18.8	65.2	49.6	146.4	7.5	5.7	19.6	8.2	8.9
South Dakota	1.6	3.1	.7	.9	.2	.1	.1	-	.1	.6	
Tennessee	55.8	80.1	85.5	65.2	27.3	69.9	33.8	30.8	29.3	57.2	58.
Texas	9.7	14.2	13.9	10.2	4.7	9.6	19.4	79.7	75.1	40.7	97.0
Utah	2.9	1.9	1.5	3.1	.5	2.0	2.4	13.6	14.2	6.8	12.1
Vermont	<u> </u>	.0	_	.0	.0	.0	.0	.0	1.0	8.0	1.4
Virginia	42.0	41.5	33.9	21.1	29.4	52.2	26.7	45.5	89.4	105.5	127.
Washington	86.8	128.2	89.0	80.8	12.0	13.6	32.7	26.4	24.8	31.2	35.
West Virginia	13.1	12.9	3.7	1.1	23.3	4.8	11.4	10.2	16.5	23.2	26.
		2.5	3.7	1.1	23.3 1.9			2.7		23.2	∠6. 4.
Wisconsin	2.9	2.5	3.0	1.0	1.9	10.2	5.6	2.7	4.0	2.0	4.
Wyoming	1.2	4.3	2.0	1.2	.1	.3	.1	.1	.3	.2	
Outlying areas	.5	2.9	.7	.5	.2	3.3	1.4	13.9	18.2	46.5	1.
	7.1	1.1	1.3	1.4	1.7	3.5	2.3	4.5	1.0	.9	16.8
Offices abroad											

NOTES: For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year.

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

**KEY:** - = Amount less than 50 thousand dollars

# Table C-111a. Federal obligations for R&D plant for selected agencies, by State: fiscal years 1990-1998

## [Dollars in millions]

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State	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	2,230.1	2,807.0	2,962.9	3,054.5	2,196.2	2,210.8	1,736.6	1,891.1	1,836.7
Alabama Alaska Arizona Arkansas California	109.7	165.0	346.1	368.2	94.1	44.1	48.9	43.4	38.6
	11.1	.2	.8	1.0	88.0	1.4	.2	3.0	3.8
	2.5	16.4	7.9	16.9	20.8	42.7	3.0	1.9	7.5
	2.2	5.3	4.4	3.3	3.9	3.9	12.5	14.1	18.5
	459.0	377.8	356.1	469.6	209.5	414.0	341.2	418.9	426.4
Colorado Connecticut Delaware District of Columbia Florida	32.3	50.7	55.6	30.0	36.9	31.2	28.4	52.6	65.2
	1.8	2.6	2.6	14.4	3.8	5.2	3.6	5.2	2.6
	-	-	.1	2.1	1.1	1.9	2.0	2.4	.8
	7.4	16.3	17.8	13.3	11.2	3.0	4.6	7.0	13.2
	68.3	132.1	143.1	73.5	101.7	40.6	65.3	66.1	66.4
Georgia	3.6	6.0	6.4	3.5	5.3	12.4	4.6	5.2	3.8
Hawaii	1.4	9.2	6.5	19.3	14.3	.5	1.7	3.0	3.9
Idaho	30.3	46.0	39.6	27.4	12.5	8.9	19.2	26.2	11.5
Illinois	116.3	319.7	183.9	201.6	208.5	190.0	147.3	134.3	152.6
Indiana	1.3	5.0	8.4	22.6	4.1	4.8	15.2	7.9	3.1
lowa	10.4	26.1	5.2	7.9	10.1	15.5	10.1	8.9	7.2
Kansas	3.1	5.2	2.5	10.1	10.6	1.2	1.5	1.4	.6
Kentucky	.7	1.6	.0	.0	3.9	4.7	2.4	.4	.0
Louisiana	33.6	26.1	26.2	29.5	21.0	21.5	26.5	18.6	30.4
Maine	.7	.7	1.5	1.0	1.9	.7	.2	.3	1.6
Maryland Massachusetts Michigan Minnesota Mississippi	178.9	235.9	229.7	264.6	196.2	390.3	240.2	299.6	307.4
	78.2	32.5	20.2	22.3	15.8	23.1	14.1	12.1	10.7
	6.6	3.0	9.1	21.7	4.5	3.7	6.3	5.0	3.0
	1.1	2.1	2.5	3.0	17.2	5.1	6.3	2.6	3.5
	47.4	50.8	41.6	42.2	31.9	36.5	32.8	38.8	47.6
Missouri Montana Nebraska Nevada New Hampshire	1.9 .5 4.1 61.1 .3	6.5 1.6 6.0 57.7 .3	1.7 2.7 5.7 59.7 4.0	1.5 1.6 1.0 50.2 .8	4.7 3.6 1.0 26.9 .3	4.6 4.9 2.3 38.5	4.4 5.8 1.0 16.1 .6	5.7 9.6 .8 1.0 2.3	4.0 2.0 .9 2.9 3.0
New Jersey New Mexico New York North Carolina North Dakota	51.3	30.0	39.0	53.2	45.3	34.9	26.7	29.9	32.1
	197.9	175.5	164.7	181.4	152.6	133.8	77.5	124.8	113.9
	100.6	107.2	194.5	177.7	186.1	159.1	164.6	152.2	122.1
	3.4	7.4	6.8	36.6	40.0	25.7	20.5	27.4	30.4
	7.4	9.0	7.4	5.5	5.8	4.9	1.5	3.7	3.2
Ohio Oklahoma Oregon Pennsylvania Rhode Island	56.3	115.4	122.2	64.1	128.1	147.5	67.5	49.7	91.2
	1.5	3.3	4.1	1.0	1.9	2.8	3.2	6.7	2.6
	12.3	3.3	1.8	13.8	6.5	5.2	8.1	5.9	3.2
	36.0	89.5	52.0	95.7	72.2	35.4	51.3	40.8	17.9
	.8	14.3	1.9	.6	.6	7.3	3.9	4.6	14.0
South Carolina South Dakota Tennessee Texas Utah	3.7	31.9	4.1	4.9	14.7	2.7	2.2	10.3	7.2
	1.7	2.0	1.5	1.0	5.6	4.3	3.0	.4	.6
	62.4	63.2	48.1	29.5	77.4	37.1	22.9	38.7	28.8
	210.6	218.0	465.7	429.1	56.6	84.2	56.5	62.8	35.8
	2.5	3.5	1.5	3.5	6.7	4.6	2.6	2.8	1.5
Vermont Virginia Washington West Virginia Wisconsin	.4	.8	.0	.1	.6	.0	2.2	.5	.1
	128.7	175.5	172.4	131.0	126.6	81.1	69.7	56.6	53.7
	44.2	34.5	54.3	71.6	71.5	64.3	71.8	64.8	14.5
	12.4	89.4	9.7	8.4	4.8	5.4	2.6	2.8	12.6
	4.4	13.0	10.2	8.0	24.6	9.6	3.0	2.0	1.1

See explanatory information, if any, and SOURCE at end of table.

### Table C-111a. Federal obligations for R&D plant for selected agencies, by State: fiscal years 1990-1998

#### [Dollars in millions]

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State	1990	1991	1992	1993	1994	1995	1996	1997	1998
Wyoming Outlying areas Puerto Rico Other Areas Offices abroad	0.2 14.9 NA NA .3	0.7 11.0 NA NA .5	1.8 6.9 NA NA .6	0.6 13.1 NA NA .6	1.8 .5 .4 .7	1.5 1.4 .3 1.1 1.3	0.5 8.3 .3 8.1 .5	0.6 4.3 .4 3.9 .3	0.7 3.1 2.2 .9 3.9

For each year, the data shown include the obligations of the 10 or 11 major R&D-supporting agencies which were requested to report to this section of the survey in that year, and represent 96 percent or more of the total Federal R&D obligations in that year. NOTES:

Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by the reporting agencies, corresponding corrections to the geographic distributions are rarely obtainable.

Because of rounding, detail may not add to totals.

KEY:

- = Amount less than 50 thousand dollars NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal

year)